ACPL ITEM
DISCARDED

PUBLIC LIBRARY
FORT WAYNE & ALLEN CO., IND.

M. L.

ANNEX

cop.1

783 L88

PUBLIC LIBRARY
Fort Wayne and Allen County, Ind.

EXTRACTS FROM RULES

A fine of two cents a day shall be paid on each volume not returned when book is due. Injuries to books, and losses must be made good. Card holders must promptly notify the Librarian of change of residence under penalty of forfeiture of card.

EXTRACT FROM STATE LAW

Whoever shall wilfully or mischievously, cut, mark, mutilate, write in or upon, or otherwise deface any book, magazine, newspaper, or other property of any library organized under the laws of this state, shall be fined not less than ten dollars nor more than one hundred dollars.

Acme Library Card Pocket

KEEP YOUR CARD IN THIS POCKET

L. B. 521-4187

ACPL ITEM
DISCARDED

ANNEX
Date Due

19 Mar '41			
15 Oct '41			
3 Nov '41			
23 Mar '42		ANNEX	
9 Jul '42			
2 Nov '43			
7 Feb '44			
10 Oct '46			
29 Mar '47			
11 Nov '49			

783

PUBLIC

Fort Wayne

EXTRAC

A fine

shall

ume

boo

to

n

W

ly

cut,

in or

deface

newspape

of any lib

the laws

fined not

nor more

dollars.

Acme

KEEP YOU

CHURCH MUSIC

What a Minister Should Know About It

By
EDMUND S. LORENZ
Author of "Practical Church Music"
Editor of "The Choir Leader" and "The Choir Herald"

WITH FOREWORD BY
CLELAND B. McAFEE, D.D.
Professor of Systematic Theology, McCormick Theological Seminary, Chicago, Ill.

"The way of the philosopher is not mine; I care only for that which is good for the church, and tends to the advancement of our little ones."
—GUIDO OF AREZZO (995–1055 A.D.)

NEW YORK CHICAGO
Fleming H. Revell Company
LONDON AND EDINBURGH

Copyright, 1923, by
FLEMING H. REVELL COMPANY

New York: 158 Fifth Avenue
Chicago: 17 North Wabash Ave.
London: 21 Paternoster Square
Edinburgh: 75 Princes Street

429291

Foreword

By Cleland Boyd McAfee, D. D.
Professor of Systematic Theology, McCormick Theological Seminary

Book World 1.25
JAN 20 1944

THE writer of this book needs no introduction on his own account. His earlier writings and his widely-known service of the musical needs of choirs, and his ministerial training and experience, have prepared him in a peculiar sense to speak to the ministry on the subject of Church Music. But the book itself breaks a new path in that it makes it possible for a minister actually to do what other books urge him to do—namely, to know music as a minister needs to know it. The writer holds out no hope of making musicians out of all ministers, but he does provide a way whereby any minister may become intelligent and appreciative in his responsibility as leader of the whole life of the church.

Of no part of that life is the average minister more shy than of its musical phases. Particularly has it been impressed upon many ministers that the organ and solo parts of musical worship are beyond their reach. Indeed, many ministers merely endure such elements in the daily worship as necessary magnets to draw congregations to hear the sermon! Hence comes the curious custom of calling all that precedes the sermon "preliminary services," ministers often complaining that they occupy so much time that the people are in no mood for worship. Yet there would seem to be no proper place in the entire service hour for anything that does not serve the purposes

of worship quite as truly as the sermon itself. The weakness of the situation is generally in a lack of appreciation of the worship-value of these other elements of the order of the hour.

Some years ago a professor of homiletics in a leading theological seminary, knowing my own interest in the music of worship, asked me to lecture to his class. Naturally, my counsel was in favour of intelligent participation in this part of church life. At the close of the lecture, the professor good-naturedly advised the class to forget as much as possible of what I had said on the subject and to keep their hands off of the music; otherwise there would be trouble. He asked how they would like to have the organist interfering with their preaching; "you do your business and let him attend to his!"

It was a curious survival of the notion that intelligence involves interference. Most ministers wish the organist did take a little more intelligent interest in their preaching; and the shortest path to that needed change will be for interest and intelligence to begin at the pulpit end.

But unintelligent interest is almost worse than none. A minister who boasts that he knows only two tunes, "one of them is 'Old Hundredth' and the other isn't," is matched by the minister who declares that he does not pretend to know anything about music, but he "knows what he likes." There are some kinds of music that nobody ought to like for the purpose of worship. But there is no use in saying that unless one is prepared to point out what makes music worshipful or even musical.

Such knowledge is possible for all except the rare physically defective persons and possibly those who have been encouraged too long in an early obsession against music. Even obscure hearing is no bar to effective interest in both hymnology and the use of tunes. Dr.

Theodore L. Cuyler was for many years so deaf that he could not tell when his large choir had ceased singing, as they sat behind him and he could not see them rise and sit again. Yet he prided himself justly on his discrimination in the use of hymns suited to his congregation and the purposes of worship. He could sense the effect of certain tunes on his audience and refused to use them. His organist for many years, Dr. John Hyatt Brewer, wrote a new setting to one of the best-known hymns in the English language because Dr. Cuyler refused to accept the widely-used tune; "It sounds like the squawk of a dying duck," he said. And all the while his deafness was notorious, but so was his persistent study of hymns and tunes.

Yet the material for the correction of this defect in ministerial knowledge has been so scattered, or so little wrought out, that no book has hitherto been available for a student of the subject. So the service has gone forward under its bifurcated leadership—preaching and praying and Scripture going one way, and organ and anthem and hymn going another way, both groups of worshipful elements hoping to do good, but often cancelling each other.

Meanwhile, it is the minister who has the final responsibility. Generally he does not know so much about the technique of music as his helpers in that field, and he need not try to know so much; but he needs to know what such a book as this will teach him so that his own life will be enriched and so that his total ministry will be widened. It will enable him to unify the service of worship, making the organist a fellow-helper in ministry, the anthem and hymn intelligible, the whole realm of music a home land. Suggestions of a great history are here, with paths opening out into the future for coming leaders.

As one minister whose thirty-five years of service have been constantly blessed by the musical elements of worship, I welcome the chance to bear testimony to the beneficent influence of such study and knowledge, I commend it to my brethren of the pulpit, the choir-gallery, and the pew, and I rejoice in this volume which makes such study feasible and pleasant.

Chicago, Ill.

Preface

IN preparing "Practical Church Music," some years ago, the writer supposed he had made his full contribution to the musical development and efficiency of the ministers of the American churches. Although not intended nor adapted to that purpose, it has been used as a text-book in some theological seminaries.

Its deficiencies for that use have led to frequent suggestions that the writer prepare a text-book that should meet the needs of seminary classes in church music. Owing to these calls and his realization of the utter lack of proper text-books, he has felt under obligation, in spite of his busy life in other lines of music and business, to serve the church by aiding its coming ministers to prepare themselves for the musical responsibilities that await them and that they cannot honourably evade.

The subject is too large that any one volume should contain the needed matter pertaining to all phases of it. Hence only the things a minister should know about church music are here treated. Practical efficiency in church music,—the how to do things—must be left to a subsequent volume which the writer hopes to prepare in the near future. A third volume devoted to methods of efficiency in the use of hymns in the church service would box the compass of the theological student's musical and liturgical needs.

While the need of seminary classes has been to the fore in the preparation of this volume, the author has not been forgetful of the minister already in the field,

who feels his musical limitations and who is desirous of enlarging the scope of his musical culture and activities. The organization of the material for class use should be of service to him instead of a handicap.

It should be said that considerable material has been taken bodily from the writer's previous book, "Practical Church Music," with only such changes as a closer organization of the matter and added information made necessary.

No apology is offered for the practical rather than academical spirit pervading this treatise, nor for the unusual recognition accorded to the music of the people. To properly aid the aggressive and efficient pastor this seemed imperatively necessary.

The writer has been cheered and encouraged in his work by the hearty approval given it by representatives of a number of theological seminaries. He is particularly grateful to Prof. Cleland B. McAfee, D. D., of McCormick Theological Seminary, not only for his genial and helpful "Foreword," but for his constant encouragement, and especially for his admirable exemplification, through his many years of most efficient work as a pastor, of the added service adequate musical training and alert interest in the musical part of the church service can render.

Appreciative mention should also be made of Rev. Prof. Herman von Berge, formerly professor in the Rochester German Theological Seminary, who by incidental suggestion and criticism and by careful proof-reading has been very helpful.

Again I am under obligations to Mr. Charles Stebbins of Dayton, Ohio, for suggestions and information regarding the pipe organ which could be secured only from a competent organ architect.

Class Room Suggestions

Some suggestions regarding the use of this treatise in the class room may be useful.

The plan of the book has been based on the fact that there are thirty working weeks in the theological seminary year. It was assumed that no seminary would find an additional hour each week a serious burden either for the professor or the student. This volume could be assigned to the course of the Junior year. The two succeeding volumes may be taken in the later two years on the same weekly basis.

There are, however, thirty-two chapters in this volume, as the author assumed that several chapters could be treated as mere reading chapters on which no recitation was to be expected.

Instead of a recitation on these reading chapters, some musical members of the class may be asked to prepare résumés of their most important matter.

This does not mean that this schedule needs to be rigidly followed. If two or three recitations each week can be provided, so much the better, as there will be greater momentum and continuity of interest in the subject.

The library of the seminary ought to contain the collateral reading suggested, as but few students can be expected to purchase the expensive and sometimes rare works referred to. This being done, the outside reading should be insisted upon.

The subject matter has been so organized and the review questions so formulated that the teacher does not need to be a musician. Very few theological professors have had so limited a general reading in history, especially church history, or in general science and art, that they

cannot supply from their own individual store illustrative material to vitalize the class room work.

It seems almost needless to suggest that the review questions are intended for the student in his study and not for the class room.

It may be wise to take two chapters for each recitation in the Introduction and in Part II and to devote time so gained to Chapters IV, V, and VI, containing as they do a mass of details of fundamental importance.

Ten to fifteen minutes of each recitation hour may be devoted to practice in reading music at sight, using the hymnal in use for that purpose. Much the better way is to have separate weekly meetings for musical practice for ten or twelve weeks of the year and to make attendance upon them obligatory.

The organization of quartets or of a chorus should be not only encouraged but urged. An atmosphere of sacred music should be created by varying the often rather routinary and unattractive daily chapel service with volunteer or even professional numbers, giving talent among the students the preference. Instead of confining the congregational singing to the well-known tunes, an occasional chapel service could be devoted to learning one or two new tunes, shortening the Scripture passage and prayer somewhat.

To keep up interest in a weekly recitation a special effort must be made to avoid a merely mechanical consideration of the topic and to fill the hour with fresh and spirited discussions.

Further detailed class room suggestions appear as a preface to some of the chapters.

E. S. L.

Dayton, Ohio.

Contents

INTRODUCTION

I. Ideas Underlying the Discussion of Church Music 21

1. The Point of View. 2. The Governing Conception. 3. The Purpose of This Discussion.

II. Why a Minister Should Study Music . 28

1. Ministerial Indifference to Church Music. 2. Musical Pastors Discounted. 3. Historical Instances of Ministerial Cultivation of Church Music. 4. Decay of Ministerial Interest. 5. Music is an Important Part of Church Work. 6. Responsibility for Music a Part of the Ministerial Obligation. 7. The Duty of Praise. 8. The Prominence of Music in the Bible. 9. Modern Music the Child of the Christian Church. 10. The Value of the History of Church Music. 11. Development of Artistic Responsiveness. 12. Music Develops Emotional Powers. 13. Sources of Illustrative Material. 14. Social Value of Musical Training. 15. Its Large Place in Public Services.

III. What a Minister Should Know About Music 46

1. Knowledge of Musical Notation. 2. The Psychology of Music. 3. History of Musical Development. 4. The Study of Great Individual Compositions. 5. Formulation of Plans and Methods. 6. Study of Musical Means. 7. This Study Should be Practical. 8. Musical Talent Not Needed. 9. The Real Difficulty.

PART I

THE PHILOSOPHY OF MUSICAL SOUNDS

IV. The Physical Element in Musical Sound 59

1. Musical Sounds. 2. Variations of Vibration. 3. The Overtones. 4. The Control of Tone Colour. 5. The Formation of the Scale. 6. Additional Scales.

V. THE PHYSICAL ELEMENT IN MUSICAL SOUND (*Continued*) 70

7. Transposition of the Scales. 8. Intervals. 9. The Inversion of Intervals. 10. Melody. 11. Rhythm. 12. Form. 13. Harmony.

VI. MUSICAL NOTATION 83

1. The Notation of Pitch. 2. The Notation of Time. 3. The Notation of Expression.

PART II

THE PSYCHOLOGY OF MUSIC

VII. THE PROBLEM OF THE CHARACTER OF MUSIC 99

1. The Problem Very Obscure. 2. Illustrations of Lack of Correspondence Between Statement and Musical Effect. 3. Physical Basis of Effect of Music. 4. The Musical Effect not Limited to the Auditory Nerve. 5. The Effect of Music not Limited to Sensory Nerves. 6. Difference in Musical Effect Depends on Physical Constitution. 7. Lack of Correspondence Between Musical Susceptibility and Mental Power. 8. The Apparent Emotionality of Music. 9. Apparently Emotional Effect of Music Differs with Different People. 10. Music Often Merely Stimulating.

VIII. THE PSYCHOLOGY OF MUSIC'S ACTION . . 112

1. The Immediate Effect of Music. 2. Music Affects the Nervous Tension. 3. The Basis of Music's Mental Stimulation. 4. Physical Reactions not the Whole of Music's Effect. 5. The Emotions and the Nerves.

IX. NERVOUS CORRESPONDENCE BETWEEN MUSIC AND EMOTION 125

1. Correspondence Between Musical and Emotional Nervous Impressions. 2. This Correspondence no Mere Coincidence. 3. Emotions Translated into Music. 4. The Vagueness of Musical Feeling. 5. Supplying an Intellectual Basis for Musical Nervous Impression. 6. Association of Ideas with Music. 7. Incongruities of Associated Ideas. 8. Prejudices Due to Improperly Associated Ideas. 9. Spontaneity in Music.

X. SOME COROLLARIES OF MUSICAL PSYCHOLOGY 135

1. Music Has no Inherent Moral Character. 2. Music as a Means to an End. 3. Music Must be Adapted to the Nervous Systems to be Affected. 4. Three Essential

Factors. 5. The Therapeutic Value of Music. 6. The Distress Caused by Music. 7. The Intellectual Side of Music.

XI. CHURCH MUSIC AS APPLIED ART . . . 147

1. Pure Art and Applied Art. 2. Music as Pure Art. 3. Music as Applied Art. 4. Music Applied to Religious Work. 5. The Final Purpose of Church Music Must be Understood. 6. In Applied Art the Purpose is Preëminent. 7. Persons to be Religiously Helped Must be Considered. 8. The Value of Adaptation. 9. Abstract Standards not Applicable to Church Music. 10. Room for Divergent Opinions. 11. Music Should Express all Religious Emotions. 12. Conclusions.

XII. HOW CHURCH MUSIC ASSISTS . . . 161

1. Music Applied in Five Religious Lines. 2. Music Useful in Every Phase of Church Work. 3. The Physical Effect of Religious Music. 4. The Pleasure Produced by Religious Music. 5. Music Predisposes the Mind to Accept Message. 6. Organizing Effect of Music. 7. The Process of Music's Emotional Preparation. 8. Music as an Expression and Intensifier of Emotion. 9. The Progress of Musical Effect in a Service. 10. Substituting Related Emotions. 11. Conclusion.

PART III

THE HISTORY OF CHURCH MUSIC

XIII. THE ORIGIN OF MUSIC 175

1. Study of the Origin of Music Purely Speculative. 2. Music Innate. 3. The Raw Materials of Music. 4. The Birth of the Artistic Musical Impulse. 5. Rhythm Took the Prominent Place Originally. 6. The Development of Melody. 7. The Development of Rhythm. 8. The Development of the Dance. 9. The Development of Musical Instruments. 10. Music Originally Purely an Applied Art. 11. The Development of Religious Ritual.

XIV. PRE-CHRISTIAN MUSIC 188

1. The Lines of Development. 2. Music Among the Egyptians, Assyrians and Greeks.

XV. PRE-CHRISTIAN MUSIC (*Continued*) . . 203

3. Music Among the Hebrews. 4. General Statements Regarding Pre-Christian Music.

XVI. EARLY CHRISTIAN MUSIC 213

1. Music in the Apostolic Age. 2. Music in the Patristic Age.

XVII. CHURCH MUSIC UNDER PAPAL AUSPICES . 225

1. Early Papal Efforts at Progress in Church Music. 2. The Gregorian Reforms and Organization of Music. 3. The Gregorian System. 4. The Development of Musical Notation. 5. The Introduction of the Gregorian Liturgy and Music.

XVIII. MEDIÆVAL CHURCH MUSIC 236

1. The Age of Musical Apprenticeship. 2. The Growth of Artistic Purpose. 3. General Characteristics of Mediæval Church Music. 4. The Effect of Mediæval Church Music on Modern Nerves.

XIX. THE MUSIC OF THE REFORMATION . . 253

1. Pre-Reformation Vernacular Hymns. 2. The New Hymnology of the German Reformation. 3. The Place of Music Under Zwingli and Calvin. 4. Subsequent Development of the German Chorale.

XX. THE ENGLISH PSALM TUNE 269

1. The Earliest English Church Music. 2. The Psalm Tunes.

XXI. THE ENGLISH HYMN TUNE 281

1. The Transition from the Psalm to the Hymn Tune. 2. Psalmody and Hymnody Compared. 3. The Wesleyan Stimulus to New Hymn Tunes. 4. The Rise of Fugue Tunes. 5. The Florid School of Hymn Tunes. 6. The Modern Hymn Tune. 7. The Later Modern School. 8. The "Hymns Ancient and Modern" School. 9. Present Tendencies.

XXII. NEW ENGLAND PSALMODY 291

1. Early American Music Puritan. 2. Divided Opinions Regarding Psalm Singing. 3. New England Psalters. 4. The Decadence of Congregational Singing and Efforts at Reform. 5. The Rise of American Psalm Tune Composers.

XXIII. THE AMERICAN HYMN TUNE 303

1. Transition from Psalm to Hymn Tunes. 2. The Reaction Against the Popular Psalmody. 3. The Practical Value of this Undesirable Music. 4. The Organization of Musical Conventions. 5. The Pioneer Work of Thomas Hastings. 6. The Reform Under

Lowell Mason. 7. The Associates of Lowell Mason. 8. The Close of the American Hymn Tune Epoch. 9. The Characteristics of the American Tune.

XXIV. THE AMERICAN SPIRITUAL . . . 314

1. The Rise of the American Spiritual. 2. Body of "Spirituals" Lost. 3. Negro Melodies an Outgrowth. 4. The Number of "Spirituals" Large. 5. The Origin and Spread of Individual Songs. 6. Origin of the Style. 7. Characteristics of the "Spiritual." 8. "Spirituals" Good Church Music Because Efficient. 9. Influence on Succeeding Movements.

XXV. AMERICAN SUNDAY-SCHOOL MUSIC . . 328

1. The Earliest Sunday-School Song Books. 2. A New Style of Sunday-School Music. 3. A Modern Style of Music. 4. The Effect of the Gospel Song. 5. The Super-Modern Style of Sunday-School Music. 6. American Sunday-School Music Abroad.

XXVI. THE GOSPEL SONG 342

1. The Essential Points of the Gospel Song. 2. The Gospel Song's Inheritance from the "Spiritual." 3. The Originators of the Gospel Song. 4. The Origin of the "Gospel Hymns" Series. 5. Gospel Songs by Other Writers. 6. The New Evangelistic Campaigns and Their Songs. 7. Apparent Close of the Gospel Song Epoch.

XXVII. THE HISTORY OF MOTETS AND ANTHEMS 353

1. Distinction Between Motet and Anthem. 2. The Development of the Motet. 3. The Development of the Anthem. 4. American Anthems.

XXVIII. ORATORIOS AND CHURCH CANTATAS . 365

1. Oratorio and Cantata Defined. 2. Origin of the Two Forms. The Transformation of the Miracle Play. 4. The Development of the Oratorio in Italy. 5. The Oratorio in Germany. 6. The Oratorio in England. 7. The Oratorio in America. 8. The French Oratorio. 9. The Passing of the Oratorio. 10. The Church Cantata in America.

PART IV

THE PIPE ORGAN

XXIX. DESCRIPTION OF THE PIPE ORGAN . . 385

1. The Pipe Organ an Exceedingly Complicated Instrument. 2. The Key Desk or Console. 3. The

Great Organ. 4. The Swell Organ. 5. The Choir Organ. 6. The Solo Organ. 7. The Pedal Organ. 8. The Transmission. 9. The Pipes. 10. The Quality of the Tone. 11. Mixture, or Compound Stops. 12. The Bellows.

XXX. THE HISTORY OF THE PIPE ORGAN . . 402

1. The Bible Organ. 2. The Development of the Pipe. 3. The Reed Pipe. 4. Organs in the Pre-Christian Era. 5. Early Church Organs. 6. The Introduction of a Keyboard. 7. The Problem of the Bellows. 8. Increasing the Loudness of the Organ. 9. Control of the Power of the Organ. 10. The Invention of Stops. 11. Securing Varied Quality of Tone. 12. The Improvement of the Keyboard. 13. The Invention of the Pedals. 14. The Luebeck Organ. 15. Recent Improvements.

XXXI. THE DEVELOPMENT OF ORGAN MUSIC . 417

1. Music of the Hydraulus. 2. The Instinct for Form. 3. How Instrumental Music Appeals. 4. The First Stage of Organ Music. 5. The Second Stage of Organ Music. 6. The Third Stage of Organ Music. 7. Organ Music in Germany. 8. Organ Music in Other Countries.

XXXII. PURCHASING A PIPE ORGAN . . . 438

1. The Pastor Needs Knowledge of the Pipe Organ. 2. Depending on Organist to Manage or Advise. 3. Securing an Organ Architect. 4. The Character of the Builder Very Important. 5. Investigate the Different Makes Under Consideration. 6. Provide Full Specifications. 7. Securing Bids. 8. The Location of the Organ. 9. Location in a Recess. 10. The Organ Should be Located in the Audience Room. 11. Preparing the Foundation of the Organ. 12. Selection of the Type of Action. 13. Selecting the Stops. 14. Selecting the Accessory Stops. 15. Checking up the Specifications.

INDEX 457

INTRODUCTION

I

IDEAS UNDERLYING THE DISCUSSION OF CHURCH MUSIC

Class Room Suggestions: This being a short chapter, the teacher may add a preliminary discussion of the whole general subject of church music, of his ideals and methods, and of the spirit in which he proposes to pursue them.

In order that this discussion of church music may be more lucid and helpful, the point of view, the conception underlying it, and the purpose, ought to be made clear.

1. The Point of View

The point of view is that of the Christian worker seeking definite results (*a*) in the winning of the lost and (*b*) in the spiritual edification of the saved. He is a worker, not a critic, not an idealist, not a dilettante, not a scholar. The touchstone of value is accomplishment of definite results.

Many discussions of church music miss the largest and most important service, because the writers observe the subject from a wrong angle. Some are so impressed with its traditional aspect, whether national, denominational or general, that they can see nothing else. Others are limited by a wrong conception of the church service as absolutely only an exercise of worship, excluding education, inspiration, and social unification. Many more give consideration alone to the artistic side of music, emphasizing existing musical conventions and technic and demanding the application of exclusively artistic criteria of judgment.

As subordinate considerations, all these have an important place and should not be disregarded in a thorough canvass of the subject. But none of them occupies the culminating peak of observation from which the subject should be viewed.

From the supreme height of spiritual efficiency in soul winning and soul building alone can the servant of God secure the complete panorama of the subject, including the lesser peaks to which allusion has been made.

2. The Governing Conception

(*a*) *Practical Efficiency.* It is important that it should be made clear that the governing conception of the minister's study of the use of music in the work of the church is practicality, or—to use a more modern word—efficiency.

While it is well to investigate the philosophy and psychology of music, to study its development from the merely organized noises of the early Old Testament to its varied forms of the present day, to mark the varied forms, conventions, and styles growing out of racial, national and denominational influences, they have value to the practical minister only as they eventually contribute to the efficiency of the music used in the immediate work of his church.

(*b*) *Musical Efficiency not Easily Determined.* But efficiency in church music is not easily determined. There are many indeterminate factors involved. In material lines efficiency is comparatively easily calculated. The ultimate end is clearly defined; the force to be used can be accurately measured; the methods are comparatively simple; the different stages of the process can be easily analyzed and differentiated; the results in detail and as a whole are fully determined and calculated. The cost

sheets of any article of manufacture tell the story. Comparisons yield positive data, and the relative efficiency is easily determined. But not so with church music. The proposed results are intangible, elusive; the mental and moral reactions of any given musical number are incalculable; its ultimate results are affected by forces and methods which act in coöperation with it, sometimes covering up the lack of musical efficiency by their practical efficiency, sometimes neutralizing to a greater or less extent the actual musical efficiency by their own lack of it.

(*c*) *Emphasis Needed on Results.* In his study of church music the minister must recognize that while fitness, dignity, intellect, culture, shall all have their modifying influence, the determining consideration in our whole investigation and study shall be moral and spiritual results.

Most of our failures in the management of church music are due to our losing sight of the results as the finally determining factor. Back in 1827 Lowell Mason, in a lecture on church music, given in a leading Boston church, which made so great an impression that a committee headed by Dr. Lyman Beecher asked for its publication, said with great emphasis: "The principal reason for the present degraded state of church music seems to be that its design is forgotten. It is often given up almost exclusively into the hands of those who have no other qualifications than mere musical talent, and who, being destitute of any feelings of piety, are almost as unfit to conduct the singing of the church as they would be the preaching or the praying."

(*d*) *Results Among All Classes of People.* Moreover, in canvassing results, the minister may not confine himself to spiritual results among highly cultivated persons, but must include the larger results to be secured among the

masses of mankind who need spiritual help all the more that they lack general education and culture. An American music critic wrote of a book he was editing: "Reference can only go to that element of the people which supports the musical art—not to the vulgar mass which confounds the emanations of the so-called music hall with music. With them this book has nothing to do." The Christian worker may not take such an exclusive attitude. Christ came to call sinners to repentance, not the righteous. It is the "vulgar mass" that needs religious inspiration, for the sake not only of its individual souls, but for that of the general community as well. Hence any broad, genuine consideration of the spiritual effects of music must include means and methods to be used among the common people.

(*e*) *Making Mere Means an End.* So much emphasis has been put upon the dignity of the means in late years that we are in danger of forgetting the actual purpose of the means. Stress has been laid upon artistic refinement and culture in our church work until the real occasion of our efforts is lost from sight. This is as true of our preaching, our church buildings, our church furnishings and our church social life as it is of our singing. Our Lord did not disdain to use spittle and the dust of the roadside in healing the blind. Should we be more fastidious than He?

This has been particularly true in the musical services. The end to be secured by the use of music is not only intangible but is often a mere incidental, coöperating with other means more immediately associated with the ultimate end in view. The music itself calls for more or less elaborate effort by composer and performers, who give a large part of their time and of themselves to the work. The result usually is that the music appears to these

assistants in church work as the ultimate end without relation to any final spiritual effect. If it does have a spiritual value, it is a mere coincidence, a mere accident unpurposed and unsought. In such cases music becomes a hypocrisy, a mechanical intrusion into the church service, neutralizing the other factors of spiritual efficiency.

It has taken too many generations in the providence of God to develop this superb means of creating and deepening the religious feeling and spiritual insight of His people that it should be travestied, as it too often is, and made an occasion of manifesting a silly personal pride.

(*f*) *The Spiritual Results Church Music Produces.* To say that the conversion of sinners and the edification of the saints are the final purpose of church music is easy enough. The iteration of the proposition until it becomes the governing idea in all our work is helpful and corrects many a misleading idea and purposeless plan.

But in what way does this upbuilding of believers and this persuasion of unbelievers follow from the psalms and hymns we sing and the voluntaries we play? By expressing the feelings of the children of God and by appealing to those of the unsaved, is the prompt and correct reply. What feelings are we to express and to what emotions are we to appeal? How are we to reach and impress these particular sensibilities? Here is the point where the usual thinking upon this important subject seems to be out of focus. It is sufficient for the present to locate the difficulty. Further on, there will be a better opportunity to define more clearly the psychology of the value and use of music in church work.

3. The Purpose of This Discussion

The purpose is to render Christian workers more efficient in their use of music in religious work by giving

them clear conceptions of the kind of music to be used, and of the definite results that may be expected from its use, and by suggesting detailed plans and methods by which these desirable results may be obtained. Ideal standards have their place, an important though subordinate one, but here we propose to be matter-of-fact, practical, concrete, with actual, immediate results among actual, average people as the final criterion in every phase of the work.

Just as in ministerial training the chief purpose is not primarily general culture—although that may be a very valuable and greatly to be desired incidental acquirement; not minute and accurate scholarship—although that may be recognized as a prerequisite very essential to the full realization of its final purpose; not literary materials nor skill in handling them in a masterly and entertaining way—although that is an important factor in the success of any minister; not mere public oratory, able to sway assembled multitudes—although that is a combined gift and acquirement that any preacher may most earnestly covet; but the preparation of men to be practically successful preachers and pastors, competent for every emergency, adaptable to all conditions and environments, skillful in methods and plans, wise in the control and management of men and women, in short, men who are able to do things, all round "workmen that need not to be ashamed":—so my purpose is not to emphasize high ideals—although without them we should sink into degrading shallowness and vulgarity subversive of the very purposes we seek; nor a sense of the high dignity of divine worship—although without that the truest success in our church music is impossible; not the value of wide acquaintance with and appreciation of the noblest music that has been written—although without that there can be

no broad intelligent mastery of any and every situation; not the cultivation of a fine and discriminative musical taste—although that too is essential to practical adaptation to varied situations and demands; but so to instruct and inspire all who have leadership in the service of song that they may be able (*a*) in the place where they are working, (*b*) among the people for whom they are toiling, to provide (*c*) the greatest religious helpfulness, (*d*) the most lifting inspiration, (*e*) the impulse to the most positive and immediate spiritual decision that the use of music can bring the souls for whom they are responsible.

REVIEW QUESTIONS

1. What three ideas underlie the discussion of church music in this work?
2. What is the point of view from which the subject is considered?
3. What results is the Christian worker supposed to be seeking?
4. What three points of view are considered ill-chosen?
5. What is the governing conception?
6. Why is musical efficiency hard to determine?
7. Why should the word "results" have the chief emphasis?
8. Should the word be limited in its scope?
9. What is the danger in the use of elaborate music?
10. What spiritual results should church music produce?
11. What is the purpose of the discussion?
12. In what does a musical Christian worker's efficiency consist?
13. What are the four subordinate musical acquirements a minister may possess?
14. What two conditions of environment must the Christian worker bear in mind?
15. What three lines of influence can the use of music bring to bear?

II

WHY A MINISTER SHOULD STUDY MUSIC

Class Room Suggestions: If a good pianist can be secured have him play a piano arrangement of the first movement of Beethoven's Fifth Symphony following the discussion of Section 11 of this chapter.

Supplementary Reading: J. N. Steele, "The Importance of Musical Knowledge to the Priesthood of the Church," *Post,* N.Y.; Waldo Selden Pratt, "Musical Ministries." Chapter on "The Minister's Responsibility," Revell, N. Y.; J. S. Curwen, "Studies in Worship Music," Second Series, Art., "Music in Theological Schools," Curwen, London; F. G. Edwards, "United Praise," Chap. I, Curwen, London; A. M. Richardson, "Church Music," Chap. I, Longmans, London.

1. Ministerial Indifference to Church Music

It is difficult to understand the very general and long continued ministerial indifference to church music. La Trobe in 1831, in his "The Music of the Church," laments over the neglect into which church music had fallen in his day: "In short, so glaring is the want of interest manifested towards devotional music, that one might imagine all reasoning upon its properties were based on the assumption that real godliness is in reverse proportion to the cultivation of the sacred song."

From that day to this the same general tendency has been manifest. The chief reason then as now was the musical ignorance of the ministry. There has been the tacit assumption that unless a minister has special musical training he is not called upon to take any interest in, or responsibility for, the music of his church service.[1]

[1] The same attitude has not been taken towards other forms of church art,—architecture, sculpture, painting, artistic glass, vestments, etc. Is there an unconscious survival of the mediæval socially contemptuous attitude towards vagrant troubadours and singers?

2. Musical Pastors Discounted

Here and there is a musical pastor, who by native musical gifts and tastes or by early environment, comes to his ministerial work with some sort of preparation to use the musical resources of his congregation. His large success, instead of stimulating others to gain a like power, is nonchalantly referred to his peculiar gifts that differentiate him from other ministers. There is even an occasional deprecation of it, as indicating a possible weakness in his composition, or a prejudiced depreciation of his general abilities, such as ministers of consciously scholarly inclinations sometimes manifest towards their colleagues who possess popular oratorical powers.

More important than ecclesiastical architecture or pictorial or plastic art, is church music, because it is so integral and unceasing a part of the current church life, while the others are only episodic in their application. There seems to be no good reason why it should not have a place in the minister's interest and thought second only to that of his sermon.

3. Historical Instances of Ministerial Cultivation of Church Music

Luther,[2] in the organization of the Reformation, the Wesleys, in what may be called the second English Reformation, Jonathan Edwards, in the great New England Revival, the evangelizing sects at the beginning of the nineteenth century, all emphasized the need of ministerial attention to the music of the church.

Indeed, much earlier in the development of the Chris-

[2] The first accomplishment demanded by Luther for a pastor was Theology, the second, Music.—Cunz, "Geschichte des Deutschen Kirchenliedes," 1855, p. 9.

tian Church the need of musical preparation of the clergy was recognized and provided for. While, as we shall see, Gregory the Great provided for the establishment of church music training schools, there were such schools in existence before his day. Charlemagne founded a number of such institutions in the northern part of his empire, which brought into the service of the church the native musical talent of the Teutonic peoples and laid the foundations of modern secular as well as sacred music. A thorough course in Gregorian music is still required of all candidates for the priesthood by the American Roman Catholic Church.

In Germany it is assumed that a candidate for the clerical office has had musical training from childhood up. Then in his formal training for the ministry, he must take special courses in the University on Pedagogics, Liturgy, Church Music and Folksong.[3]

In the early part of the eighteenth century there was extraordinary attention paid to the subject of church music in this country. Such ministers as Mather, Ed-

[3] In the report of the Joint Commission on Church Music to the General Convention of the Episcopal Church at Portland, Oregon, in 1922, the following recommendations appear:

"It is our opinion that in every Seminary and Theological School a course of instruction should be provided in the History and Appreciation of Church Music (including musical hymnology). . . .

"To this end we most earnestly advise that such a course be outlined, providing for a systematic and thorough grounding in these subjects; and that the coöperation of the seminaries and theological schools be secured in its establishment as a part of their curriculum to be required of all students."

Special attention is called to this report which reviews the musical work of the church in a very sympathetic, sensible and thorough way. It is eminently worth any minister's while to secure a copy of it and to read it thoughtfully.

wards, Dwight of Woodstock, Prince of South Church, Boston, and others preached to their own people upon it and exchanged pulpits in order to impress their several congregations with the importance of the people's participation in the service of song.

In the middle of the nineteenth century there was also quite a great deal of interest in the subject. Thomas Hastings, Nathaniel D. Gould, Richard Storrs Willis, and others wrote valuable books emphasizing the religious and practical side of church music. Lowell Mason, Darius E. Jones and George J. Webb started a journal, "The Choral Advocate," to create a wider and more intelligent interest in music of the churches, and leading clergymen supported the enterprise with influence and pen. One of the results of that reform movement is the body of American church tunes that have been so productive of good, not only in this country, but in England and in the mission fields of the world.

4. Decay of Ministerial Interest

During the last half century this ministerial interest in the practical phase of the subject has passed away. What interest has been shown has been historic, academic, and artistic. The whole subject has practically been handed over to professional musicians and popular leaders of song. So far from there being an effort to create an interest in church music among young ministers, it often occurs that older ministers, and even professors of practical theology in our seminaries, advise them to keep their hands off the music in their congregations. Is there need to animadvert upon the cowardice, the caution gone to seed, of such counsel?

Whatever the reason, it is very unfortunate that this ministerial indifference towards church music should

persist. There are so many reasons why the very opposite attitude should be taken,—one of abiding, intelligent, enthusiastic interest,—that indifference reflects alike upon the piety and the intelligence of the minister who ignores the claims of his church's music upon his attention.

5. Music is an Important Part of Church Work

The prominent place music occupies in the life of the church alone not only justifies but loudly demands attention and study from the director of the local church's activities of so abiding and unfailing a phase of its work. Whether Bishop Beveridge in his defense of the singing of psalms indulges in unconscious irony or not, he certainly was right in his fundamental proposition: "Some, perhaps, may wonder why any one should thus trouble himself about so low and mean a subject as this is generally thought to be. But I think nothing mean that hath any relation to the service of God and His Church."

6. Responsibility for Music a Part of the Ministerial Obligation

When a minister takes upon himself the ministerial vows he accepts all the obligations involved. He cannot say, "I am a preacher and not a pastor." He still is responsible, not only for his congregation as a whole, but for every individual in it. He cannot say, "I will preach and pray in the church service, let him who will run the music." The music remains an essential part of the service, for the whole of which he is responsible, and affects for weal or woe the reactions of the service upon the people, and he cannot evade responsibility.

This is all the more important since without authorita-

tive leadership the musical part of the church life cannot succeed, any more than any other phase of its activities. No matter how competent the organist and the director of the choir may be, they cannot reach up to their highest efficiency except as they coöperate with the highest authority in the congregation in the development of his methods and plans. Waldo S. Pratt in his suggestive and helpful "Musical Ministries in the Church" well says, "In the last analysis the thorough success of musical parish work is impossible without somewhat positive qualities in the minister and in his habits of thought and action. In the musical department, as in others, the minister is formally commander-in-chief and his technical headship must be confirmed by his being actually the central authority and the fountainhead of right ideas, dominating impulses, and wise plans of action."

The Protestant Episcopal Church, a liturgical body, naturally places great emphasis on sacred music as it is so integral a part of its noble liturgy. It has a canon which really only expresses what is tacitly recognized in every denomination regarding the minister's responsibility for the music in the services over which he presides.

"It shall be the duty of every minister of this church, with such assistance as he may see fit to employ from persons skilled in music, to give order concerning the tunes to be sung at any time in his church." To this canon as to all others, the candidate for ordination solemnly promises to conform. But how can he properly fulfill his vows if he has had no proper training to fit him for this responsibility?[4]

[4] The following is an early recognition of the value of music in religious work:

"So instrumental is musick to all the uses of religion that it

7. The Duty of Praise

If the chief end of man in general is to glorify God and to enjoy Him forever, as the Shorter Catechism teaches us, may we not draw the inevitable corollary that such is the peculiar purpose of the minister's life? The representative and ambassador of God, the intimate friend to whom are revealed the deep things of spiritual privilege,—who should take greater delight than he in praising and adoring his King and his Friend? He should emulate his fellow servants in heaven who continually do cry, "Holy, holy, holy, Lord God of Sabaoth!" The singing of psalms and hymns and spiritual songs should be no mere duty, it should be the delight of his life. Jonathan Edwards in his sermon on Self-examination enforces the duty of singing on all Christians. "As it is the commandment of God that all shall sing, so all should make conscience of learning to sing, as it is a thing which cannot be decently performed at all without learning; those, therefore, who neglect to learn to sing *live in sin* (the italics are Edwards' own), as they neglect what is necessary in order to their attending one of the ordinances of God's worship." If this attention to singing is the duty of all Christians, is it not in an intensified degree that of the minister to whose care their united praise is entrusted?

looks as if there could be no religion without it. 'Tis a pleasure to the greatest saint; and has an influence on the gravest prophet; 'tis an employment for a blessed angel and an entertainment to God Himself. 'Tis the life of heaven and the joy of all the ends of the earth. In a word, 'tis so humane an excellency, that 'tis an offense against nature to suppress it; and so divine an accomplishment, that 'tis almost blasphemy to disparage it."—Quoted from sermon of Dr. Charles Hickman in 1695.

429291

8. The Prominence of Music in the Bible

To the devout minister the prominence of music in the Bible gives no small sanction to it and lays no small burden of duty to cultivate it upon him.

Bible history is pervaded by religious singing. From the time the morning stars sang together until the prevision of the great marriage supper of the Lamb, where John heard, as it were, the voice of a great multitude, and as the voice of many waters, and as the voice of mighty thunderings, saying, "Alleluia! for the Lord God omnipotent reigneth!" the Bible is one long illustrated song service. Again and again the dreary wilderness of detailed ritual, or dry pedigree, or petty history of petty tribes and of petty wars, blossoms out into an oasis of song, and the high palms of beauty wave over the refreshing fountains of the songs of Miriam, of Deborah, of David's lament over Saul, of Hezekiah's thanksgiving. How many millions through all these generations have laved their parched lips at the sweet waters of the Psalms, and how often those who drank became in turn living fountains to bless and comfort succeeding generations!

Have you ever stood in imagination among the eager throngs, when all the men of Israel assembled themselves on that great Dedication Day of the temple of Solomon, and watched the orchestra and the chorus that had been organized? And did you note that as the trumpeters and singers were as one, to make one sound to be heard in praising and thanking the Lord, and when they lifted up their voices with the trumpets and cymbals, and instruments of music and praised the Lord, saying, "For He is good, for His mercy endureth forever," that then the house was filled with a cloud, even the house of the Lord; so that the priests could not stand to

minister by reason of the cloud; for the glory of the Lord has filled the house of God?

Let us stand outside the upper chamber where the solemn mystery of the Eucharist is being instituted and listen while the men's choir sings the Paschal Hymn once more, for the last time together, as a doxology. Do we not hear the voice of their and our Master leading its strains? With the cloud of the Lord's glory in the ancient temple and the Master's leadership of His men's choir on the eve of His great passion, can His servant be indifferent to the importance and value and blessing of sacred song?

9. Modern Music the Child of the Christian Church

Again the minister's interest in music should be stimulated by the fact that modern music is the child of the Christian Church. Out of the meagre unisons and unorganized modes of Grecian sacred and secular music, the clergy and monks of the early Church and the pious choral leaders and organists since the Middle Ages, have evolved the infinitely varied expressiveness and power of our modern music.

10. The Value of the History of Church Music

If it is important that the minister should follow the development of Christian doctrine from the apostolic age until the present; if it is wise that he should be able to give the leading epochs in the history of Christ's kingdom on earth, and have a more or less detailed knowledge of the life-work of the great leaders of the Christian Church, it would seem that he ought also to seek to have a comprehensive view of the development of the music which

forms so striking and important a part of every public service.

Why should not Palestrina be as interesting a character as Savonarola? Why should not Bach warrant study as well as Melanchthon? Why should not the Genevan Psalter interest a minister as much as Calvin's Institutes? The new hymns and chorals introduced by Luther did more to spread the Reformation among Germanic peoples than did the Augsburg Confession; why should they not have at least equal attention, particularly as they still are full of life and power, while the Lutheran symbol is a petrified fossil?

Indeed it would be impossible for him to have any intelligent basis for his judgment upon church music without such historic knowledge. If he knows nothing about the contrapuntal ingenuities and fantastic polyphonies of the Middle Ages, how can the name Palestrina mean anything to him, and how can the reforming influence of the Renaissance upon church life be fully comprehended?

If he knows nothing about the chorale in its relation to the German Reformation, knows nothing of its influence upon German life and character through the centuries that have since passed, how can he appreciate its solemn dignity and power, or how can he understand its hold upon the German people? In no other way can he hope to explain its adaptation to their religious life and character, or comprehend why, though so powerful among them, it should not have equal power or adaptation among the American people who have had a different history and have developed a nervous system of an entirely different type.

If the minister has not followed the development of the American hymn tune from William Billings down to the present time, if he does not know the extraordinary in-

fluence of Lowell Mason upon American church music, or the progress of the English hymn tune from Tallis down to Dykes, how can he judge as to their relative claims upon American churches?

Surely he ought to have acquired some knowledge of the evolution of the American Gospel Song from the rude choruses that were sung by the early settlers in the log schoolhouses and churches, and so be led to appreciate that it is the outgrowth of American religious conditions and a very part of the web and woof of American church life. How else can he judge of its real practical value and its appropriate place in our more sophisticated church activities, when the special pleader for Anglican church music vehemently attacks this characteristically American form of church music?

As the careful study of the history of Christian apologetics, in which he notes the swinging of the pendulum of thought from severely orthodox doctrines to liberal rationalism, only in due time to swing back again, gives the Christian minister serenity and repose of mind in the face of radical higher critics and other rationalizing teachers in and out of the Church, so an intimate knowledge of the history of church music beyond the Atlantic and in our own country will give a poise of mind that cannot be disturbed by doctrinaires, or by travellers in Europe who have had a novel musical experience and who think they are bringing back a new musical gospel.

II. Development of Artistic Responsiveness

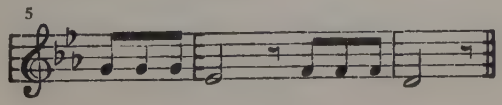
While the artistic temperament has not been given to all men in like degree, yet it is possible to develop capacity for the appreciation of things beautiful. The religious and moral are the chief categories that engage the mind of the minister, but he cannot properly emphasize and

impress them upon his hearers unless he have also an interest in and sympathy for that which is artistic and beautiful. While the categories of the true, the good, the right and the absolute are distinct from that of the beautiful, it is nevertheless closely associated with them and greatly assists in their development.

There is nothing so stimulating to the imagination as is music. The vague physical sensations it produces bring waking dreams to those who are naturally imaginative and in their minds are translated into pictorial forms.

Who can hear the Fifth Symphony of Beethoven with its *motif* of Death knocking at the door[5] without being deeply impressed, and stimulated to an intense degree? Now with one instrument, now with another, the hand of Death is heard knocking, knocking, persistently knocking. The phrase is mysterious, haunting, ever recurring, sometimes sweet and plaintive, sometimes with the roar of the ocean sounding through its measures, sometimes crashing and pounding with brass and cymbals, as though siege guns were being trained upon the heart. As the music proceeds, this Death March of the race brings pictures of the earth's generations as they were born, only too soon to pass away under the hand of the great destroyer. The lonely death in the wilderness, the quiet cot surrounded by weeping loved ones, the gory pomp of battle where thousands perish,—how the pictures crowd upon the imagination! Then the Adagio sings out the psalm of life, tender and sweet, and often plaintive, and then rises into the very climax of power and impressiveness as life at last celebrates its complete victory over human mortality.

5



Surely under a spell such as this there must come to the dullest brains new possibilities of thought, fresh conceptions of more beautiful things than he had ever before dreamed, while wider horizons break in upon him. If any preacher has reason to fear that his public efforts are dry, uninteresting, and without genuine appeal to the minds and hearts of men, let him quicken his imagination by reading great poetry and hearing good music, and the wilderness of his mind will blossom as the rose.

12. Music Develops Emotional Powers

Closely allied to the stimulating effect of music upon the imagination is its appeal to the emotional nature. It may be made an opportunity for emotional training and development, such as can be secured in possibly no other way. While the emotional minister has to contend with shallow fluctuations of mood, or what is worse, conscious stimulation or even a simulation of emotion he wishes to feel, his unemotional, matter-of-fact brother, who lacks these weaknesses and temptations, lacks also his power over men,—for only a small proportion among men think, while all feel.

The naturally phlegmatic minister ought to develop his latent powers of emotion, and he will find music a great help in the effort. To hear martial music, with its irresistible tramp, tramp, tramp, demanding action and progress, is to develop courage and aggressiveness. To listen sympathetically to the stately funeral march will lift personal grief and sense of loss to a more dignified and nobler plane of feeling. The tender ballad, the touching song, will call forth his sense of pathos and render him more susceptible to the sorrows of his people. The impression made by some great anthems of praise, rising

grandly above the commonplace of life's mechanical routine, must render him more capable of approaching his Maker with proper solemnity and dignity of feeling and speech. So throughout the whole gamut of human susceptibility, music by laying the physical basis of feeling inspires feeling. This feeling awakes the latent resourcefulness of matter and manner and fits the man for general apprehension and vital consideration of the great subjects with which it is his mission to impress the hearts and lives of his hearers.

13. Sources of Illustrative Material

While the whole world is open to the preacher from which to secure illustrative materials, there is no realm of human thought more likely to be appreciated and understood and yet so fresh and little used as that of music. Our public schools are singing schools and our little folks are learning to do, re, mi, with their alphabet. In every house is the tinkle of the mandolin, the strumming of the guitar, the swelling notes of the reed organ, or the almost orchestral variety of the piano. Many who are not studying music at all, are unconsciously absorbing its leading facts from their musical environment.

The preacher, therefore, will find his audience peculiarly responsive to metaphors, similes, and even more extensive historical or artistic illustrations from this field. Where there is no previous knowledge, there is at least interest, and the fact of musical history, the musical anecdote, the description of some great composition, the allusion to some famous song, will catch the lagging attention. Nay, more! These musical memories are closely associated with the sources of feeling. If the string of sympathetic memory is set to vibrating, it is more than likely that the other strings of human feeling

will vibrate in harmony with it, and so prepare the hearer for the impression the preacher desires to make.

14. Social Value of Musical Training

A more or less thorough knowledge of music will give a minister greater command over his congregation. Musical people will be attracted by the community of interest and taste. Those who are intimately identified with the music of the church will have a sense of comradeship otherwise not likely to exist. This intimacy will make possible many plans that otherwise could not be considered. If he is wise and tactful, he can win their loyal coöperation for many plans outside of the church music.

This musical knowledge will give him a hold upon his young people and secure their loyal support, for the young people are usually the most enthusiastic devotees of music. It will give him larger opportunities for leadership and an additional basis for authority. It will put him in touch with every form of the church activity and give him an excuse for a controlling influence that might otherwise have been resented. It makes him the master of the whole situation.

15. Its Large Place in Public Services

But if there were no other reason for the minister's interest in music, its large place in the public service would be all-sufficient. From one-fifth to one-half of every service over which the minister has authority is taken up with music. In the public service there are the preludes, offertories, and postludes by the organist, the anthem, responses, and solos by the choir, and the congregational singing. The responsiveness of his hearers to his message will greatly depend upon the pre-

liminary music, the final impression upon the closing musical exercises. Would any competent manager of an equally important enterprise leave such controlling influences to the mercy of chance, or to the ignorance or the perversity of assistants?

How much the prayer service is depressed by incompetent leadership in song, or inadequate musical provision, hardly needs emphasis. Dull, uninspiring music in the Young People's Society is sure to wreck its meetings. Bright, lively songs in the Sunday-school assure large attendance, and spirit and enthusiasm in all its work. In an evangelistic meeting the best workers now recognize the singing to be more than half the battle.

Now whether this varied music in all these services shall be effective and helpful in realizing the results he desires of any meeting, or whether it shall be absolutely in antagonism to his purpose, leading him to miss the opportunities the meeting affords, depends upon the minister's skill in controlling and shaping the musical service.

Nothing can be more pitiable than the ignorant helplessness of a minister who depends upon the more or less inefficient musical resources of his congregation. He has no control over it; he has no means of directing its influence or shaping its methods. His musical subordinates may have absolutely and diametrically antagonistic ideas of what the church service should be; but he is helpless. He may wish to produce distinctly religious results; the most competent musical help often ignores religious results and seeks only those that are artistic.

The outcome is a kingdom divided against itself, a service with two distinct and often antagonistic ideals and purposes. He may realize the difficulty, but in his ignorance he is unable to change the situation or overcome the hindrances that handicap his work. He may

have some tender message for his people, while the musicians back of him sing jubilant strains of martial music and the organist's voluntaries are brilliant with technical skill utterly out of harmony with his purpose in the service. He may wish to inspire the church to aggressive action and to make the service a very trumpet of awakening, while the choir sings an anthem of tenderness, and his organist discourses sweet music that serves to quiet and depress the nerves of his people.

On the other hand, if the minister is a musician, his musical helpers feel that he can speak upon the subject with authority; he can understand their difficulties, can appreciate their work when it is well done, and by a kindly word and appreciative look can develop their loyalty to him personally. He is able to prepare their minds, by quiet suggestions and earnest advice, for the larger conception of the musical part of the service. In a very short time he can make them his faithful coadjutors, studying how to realize effects he desires to secure, advising him as to the compositions at their command, and often suggesting not only musical means by which the service can be enriched and made more effective, but also methods that can be employed in his part of the service that might not otherwise have occurred to him.

Having at his command, therefore, no longer simply his sermon and the Scripture readings, but calling to his aid the use of hymns and tunes with their varied and impressive rendering, the use of solos and duets and concerted numbers, the use of the choir with its chorus of intelligent and well-trained voices, his work will gain a richness and a variety and a unity and an impressiveness that the unmusical pastor never can hope to secure.

It will not be amiss to warn the minister that his control of the music of his church is not to be exercised in

a domineering, masterful way any more than in other phases of the church life. He may have an iron hand of purpose to get the best spiritual results, but it must be upholstered with the most velvety geniality and tact.

REVIEW QUESTIONS

1. What is the too frequent attitude of ministers towards church music?
2. What is too often the judgment of ministers regarding those of their number who are musical?
3. In what periods of the history of the Christian Church has music had most attention?
4. What prominent ministers in the American churches have interested themselves in the proper cultivation of church music?
5. What unfortunate advice is often given to young ministers by their older associates?
6. What justifies greater attention to this branch of church work?
7. Is music included in a minister's general obligation?
8. What is the attitude of the Protestant Episcopal Church towards a minister's musical obligations?
9. Why is the duty of praising God preëminently that of the minister?
10. What was Jonathan Edwards' judgment regarding public praise?
11. Give Biblical instances of the use of music on important occasions.
12. What historical interest should the minister have in music?
13. What personal reasons are there for the cultivation of music?
14. State music's emotional value to the minister.
15. What homiletical value has the study of music?
16. How can music aid in the minister's relation to his people?
17. What is the relative importance of music in the several services of the church?
18. How will ignorance of music defeat a minister in his plans?

III

WHAT A MINISTER SHOULD KNOW ABOUT MUSIC

Class Room Suggestions: It may be an aid to a vivid impression of the several musical needs of the minister to write the leading points of this very important chapter on a blackboard, or on a large chart of white paper placed on an easel.

THERE is no reason why an intellectual, alert-minded minister should not find the rudiments of musical notation with their varied signs and symbols as interesting as those of algebra or geometry. These signs and symbols are not mere puzzles, arbitrary constructions of misapplied ingenuity, but clear expressions of definite mathematical facts and their relations.

In like manner the study of music opens out a new mental dimension full of new insight and experience. As he appropriates the rudiments of the art of Bach and Beethoven, their genius grows greater in his estimation and not less, for he learns to appreciate the meagre materials from which such ravishing or impressive strains are constructed. What was before pleasing but rather meaningless sound becomes intelligible, and proves the vehicle of expression for thoughts and feelings that words are too clumsy and crass properly to convey.

1. KNOWLEDGE OF MUSICAL NOTATION

While acquiring a vocal control that will make singing by note possible calls for very considerable time and practice, a knowledge of the rudiments of music can be

acquired by any man of average intelligence by using the odd moments of a single week. A G Clef sign 𝄞 or an F Clef sign 𝄢 is no more a mere hieroglyphic without meaning, but a recognition of the fundamental difference between human voices. A sharp (♯) is no longer confused with a flat (♭), but both become keys to the different tonalities of the scale. He can tell what is the error in the singing of a tune when the rhythm is disturbed, asking that a half note be given its full time instead of being sung as a quarter, or calling attention to the dotted quarter and the subsequent eighth which are not given their relative values. He will know something of the beating of time, when occasion arises for his personally emphasizing the time of a piece that is being sung, and will not saw the air in a blundering, purposeless way that makes him ridiculous to the musical people of his congregation.

There are plenty of helps in this study aside from Chapters IV, V, and VI of this work. The music text-books used in the public schools ought to serve the minister's purpose. Even better will be the "Rudiments" found in the singing school books, no longer so plentiful as of yore, the more is the pity! There are music teachers in every community who would be delighted to clear up points that appear difficult. If the minister's pride will permit, he can arrange with his organist to tutor him in his study.

2. The Psychology of Music

The minister ambitious to be spiritually useful will not be satisfied mechanically to adopt conventional applications of music to church work, using plans and methods with a blind instinct of social conformity, or with a sense of the peremptory authority of experts on the subject.

While he may not be able to tunnel very deep into the reasons of varied effects of music, for, like the effects of weather conditions on the human system, mob psychology, telepathy, and other psychological mysteries of the human organization, it is largely a region yet unexplored by physiology, psychology, or philosophy, yet there are some general facts and tendencies within his reach on which he can base his hopes of realizable effects and his practical plans and methods. The next few chapters may supply a little aid in the study of this obscure subject.

3. History of Musical Development

Once initiated into the mysteries of the musical arcana, the history of its development will be of intense interest, as he studies the lives and works of the epoch-making composers who have struck out new paths and risen to higher and wiser conceptions of the expressiveness of music.

4. The Study of Great Individual Compositions

The study and analysis of the world's greatest compositions, sacred and secular, both in score and in performance must discipline the mind and refine the susceptibilities. Concerts and other musical performances will no longer be occasions of mere pleasure, vague and vacant of thought, but an opportunity for alert-mindedness to find new material for study and for the breaking through into new horizons of mental and artistic culture.

Beginning with the leading gospel songs like "That Will be Glory for Me" or "The King's Business," then "The Life Line," "Rescue the Perishing" and "I Need Thee Every Hour," he should raise his power of appreciation to anthems like Shelley's "Hark, Hark, My Soul" and then to great choruses like Gounod's "Unfold, Ye

Portals," Handel's "Hallelujah Chorus," Haydn's "The Heavens Are Telling." Indeed, every opportunity to hear these great oratorios, "The Messiah," "Redemption," "Creation," "The Judgment," "The Crucifixion," and many others should be seized and even sought after as a means of broad musical culture.

It will be worth his while to keep track of the Symphony concerts given by the great orchestras in our great cities and make an opportunity, even at considerable financial sacrifice, to hear the masterpieces of the great composers, such as Beethoven's Fifth Symphony, Tchaikovsky's "Pathetic" Symphony (No. 6), Wagner's Overture to "Tannhäuser" and the like. A visit to New York or other orchestra city, should always schedule these great musical opportunities.

But a good supply of well selected rolls for a player piano or records for a talking machine will give opportunities not to be despised in getting an understanding of the things of musical art. Here is pure culture that will react upon the whole thinking and feeling man and change the very grain of his nature.

5. Formulation of Plans and Methods

The minister ought, furthermore, to have a working theory of the methods by which music can be used. What plans and methods can be used to make his congregational singing full and impressive will call not only for a study of those used elsewhere, but of their adaptation to his own particular congregation. He ought to have a clear idea of the value and place and limitations of the Gospel Song.

The use of responses by the choir, or even by the congregation, ought to have careful consideration, and the limits of their practicability among his particular people

ought to be settled. Just how and to what extent anthems will enrich his public service should be canvassed and a definite practical conclusion sought.

How to secure the value of solo work in his own congregation, and what its character shall be, will cause him no little anxious thought. Whether the use of cantatas, or even oratorios, in enriching the spiritual as well as the mental and artistic life of his community, will be practical, calls for a careful canvass of the situation. It may even be an open question whether he has not a duty to perform to the musical culture of his community by the suggestion and fostering of concerts and recitals.

6. Study of Musical Means

Not only the methods, but the means, will need his unceasing attention.

(*a*) *The Music.* With the great variety of hymn tunes with which our hymnals are flooded, likely to distract his artistic and practical judgment, he will need to give them careful study and reach a working basis which will enable him to use only the best for his purpose in an intelligent way. An occasional hour spent with the church organist playing over the tunes in the hymnal will be time well spent.

A reasonable attention to the new hymnals of every kind and size issued for church service, for devotional meetings and Sunday-school use, must be given. The new gospel songs that rise into popular use, some temporarily, others permanently, should be promptly noted for early introduction. The vocal solo suitable for church use that is heard in some other service may be added to his mental repertoire for suggestion to his own singers.

This is even more true of the anthem music which in many churches forms so important and valuable a part

of the service. Still more important is his practical knowledge of the contents of the various hymnals and song-books in use among his people and the anthem books and octavos already in possession of his choir.

Just as the preacher cultivates the homiletical habit until it grows so automatic that it seems an instinct, gathering ideas and illustrations from every source, so he should cultivate the habit of mental alertness for musical materials for the rest of his service.

(*b*) *The Performers.* The same hospitality of mind should be developed in the recognition of musical talent among his people. The budding young woman whose voice is strengthening and enlarging its scope into a valuable soprano, or into an even more valuable alto, or the young man whose changing voice is setting into a musical tenor or bass, should nowhere find such quick recognition as from the sympathetic pastor eager to build up his musical force.

The child struggling with the violin, flute, or any other musical instrument, may be a severe discipline to the patience just now, but the wise pastor gives encouragement to it as a coming member of the occasional or permanent church orchestra. Whatever the musical talent, the proper place and opportunity will in due time arrive for its development and use.

7. This Study Should be Practical

As has been suggested in a previous chapter, the minister's study of music ought to be preëminently practical. While the impulse to consider it from an artistic standpoint will be spontaneous and strong, as a minister, charged with the responsibility of comforting and inspiring the souls in his congregation and of helping them in their devotions, it is music as an applied art that

should appeal to him most effectively, for it is helpfulness, not conformity to abstract ideals, that is the final criterion of success.

Hymns, and the tunes that give them the needed wings, are means to definite ends, and are to be judged and valued in so far as they realize these desired ends. The more clearly these ends are formulated, the more easily can the means be judged. Forgetting the purpose in view leads to abstract and impracticable ideals and standards, which, however admirable and attractive in themselves, culminate in an utter subversion of the ends that after all are so much more important.

8. Musical Talent Not Needed

It may seem to many that such a program of musical education as has been outlined above is practically impossible. There is an erroneous impression abroad that in order to understand music one must have peculiar gifts. Indeed so profound is this impression that the corollary has been drawn that any one who understands music must be a peculiar person set apart from his kind.

While it is true that peculiar talents are needed for the highest executive ability in music, and more for creative work, just as such extraordinary talents are needed for writing the highest type of poetry, for producing the greatest architectural designs, or in utilizing the strategic possibilities of an army, it is also true that any one with ordinary intelligence can learn the rudiments of music and understand at least the mechanical elements of the art.[1]

[1] "My grandfather, a Methodist preacher, learned to sing at seventy. While his wife lived she always led the congregational singing. Grandfather believed he couldn't sing. When she died he often found himself inconvenienced by the lack of some one to

For a minister to ignore the subject of music because he has no talent for it, is as foolish as it would be for him to refuse to study Greek or Hebrew, or even the use of good current English, because he has no talent for language such as had Poe or Lanier or Stevenson, those wizards with magical power over the English language. He might as well refuse to write because he could not produce such calligraphic examples as ornament the studies of our writing-teachers in business colleges.

It may be true in some cases, where the capacity for detecting differences in pitch is wanting, that he may not be able to learn to sing by note, or even to learn a tune by rote; but even in such extreme cases, by the application of mere intelligence, such as would be applied to any other subject, he can secure all needed knowledge preparing him to give direction and oversight to the musical work of his church.

It ought to be made a mark of inferiority, a thing of discredit to any minister who aspires to the management of the life of a Christian church, that he should not have this rudimental knowledge of notation, and a fairly clear idea of the uses and applications of music in his work.

The demand is not for a technical education in a difficult course, requiring long continued study leading to expert knowledge and skill. What is wanted is an absorption of musical facts, an apprehension of musical principles, and a purposeful study of the applications of music to church work. The general facts of music in its theoretical, historical, æsthetic, and practical aspects should be known to the minister. That is to say, he

lead. He determined to learn. He studied for some six months under a vocal teacher and succeeded in training his quavering old voice to correctly 'carry the tune.'"—Leslie Shannon Williams in *The Etude.*

should have a working knowledge, ample for the exigencies and needs of an efficient and capable pastorate.

This does not mean an encyclopedic, or minute knowledge such as one might expect from a professional musician. Indeed, the danger of a too wide and microscopic knowledge is that he would lose his sense of the proportionate value of facts and principles, as so constantly happens to experts in every line of intellectual effort. His natural emphasis of historical and theoretical aspects might lead to ignoring practical considerations, and lead to a lack of harmony with his musicians.

There is no need of a great outlay of time and effort, but there are required the open mind and the observant ear, so that with here a little, and there a little, the minister is educating himself in music and preparing himself to apply it practically. By his education in youth, if it was what it ought to have been, by his reading of musical literature, current and permanent, by his hearing of music, by his amateurish and halting efforts at playing or singing, but above all by the careful observation of the methods and plans by which the results may be achieved that one may expect from music, the preparation will be obtained for an intelligent oversight of the music of the church.

That this can be done is proved by the example of Moody. He was no musician. Whether he had a particle of the artistic temperament may be doubted. But he knew the power of music in securing immediate practical results, and, what is even more important, he knew what sort of music would produce the results he wanted. He was one of the best judges of the practical, available value of a new gospel song to be found in his day and generation, for his practical judgment was not distracted by artistic considerations.

They tell a characteristic story of him at Mt. Hermon that ought to give heart to the minister who is least gifted in music. He called for the Long Meter Doxology at one of their school meetings. The organist, who was something of a wag, played Yankee Doodle in a very slow and sedate way instead. Moody broke out impulsively, "I don't know why it is, but dear 'Old Hundredth' grows sweeter every time I hear it!" The assembly laughed, and so did Moody when some one whispered the facts to him. If a man so musically ignorant as that can transform the religious life of two nations, largely by the use of simple gospel songs, why should any of us despair of achieving at least a measure of success?

9. The Real Difficulty

The real difficulty with unmusical ministers is not that they cannot understand music well enough to have a general oversight over the musical activities of their churches, but that they are not spontaneously interested, have no inner urge to occupy their minds with the subject. For this not they, but their ancestors are responsible.

But they themselves are responsible if their interest in their own spiritual development, in their life-work and in the spiritual success of their parishes does not amply replace the lack of congenital musical impulse. That a minister is uninterested in the musical work of his church argues that he is lamentably ignorant and obtuse to a part of public worship hardly second to his sermon, or that, in his self-centeredness, he cares only for that part of the service in which his own egotistical self is conspicuous.

The thoughtful pastor, with his plans and methods

sought and canvassed, his musical materials gathered and studied, the varied talents of his people appreciated and marshalled, is ready to do efficient work, for these are his resources, these are his musical tools with which he works. Can he expect to be recognized as a skillful and accomplished workman if he does not understand their use? Altogether the musical side of his calling will be found worthy the keenest interest and the most earnest study of the ablest and most intellectual minister.

REVIEW QUESTIONS

1. Why should a minister be familiar with musical notation?
2. How does the psychology of music interest a minister?
3. Why should the study of the history of musical development prove helpful?
4. Why study, either privately or through public performance, the great musical compositions, sacred and secular?
5. What is there in the practical use of music that a minister should know?
6. What two sides of the musical means to be employed should engage a minister's attention?
7. In all this study what attitude should the minister take towards music?
8. What is the need of special musical talent?
9. In what way was Moody an important example?
10. What is the real difficulty among ministers generally, and how can it be met?

I

THE PHILOSOPHY OF MUSICAL SOUNDS

IV

THE PHYSICAL ELEMENT IN MUSICAL SOUND

Class Room Suggestions: This chapter and the two succeeding it are of supreme importance. There should not only be recitation, but demonstration from the hymnal or other accessible music and even blackboard work by individual students. Better omit several chapters later in the book than to scamp these three chapters. As a pleasing and perhaps profitable break in class routine secure the coöperation of some lively public school music supervisor or local director to review the three chapters before leaving them.

Supplementary Reading: Maurice S. Logan, "Musicology," Hinds, Noble and Eldridge, N. Y.; Alex. Wood, "The Physical Basis of Music," Putnam, N. Y.; Wm. Pole, "The Philosophy of Music," Kegan Paul, Trench & Co., London; Herman L. F. Helmholtz, "On the Sensations of Tone," Translated by A. J. Ellis, Longmans, London.

BEFORE proceeding with the main discussions of this treatise, some understanding must be had of (*a*) the philosophy[1] of music, of the underlying physical facts, and also (*b*) of the means used to give them expression. The extreme importance of a thorough canvass and actual mental appropriation of these underlying statements and definitions need hardly to be stressed.

Space forbids a review even of the abstruser mathematical investigations of sound already well begun by Pythagoras in the sixth century before Christ. To any one interested in acoustics there is a rich literature open.

[1] The word "philosophy" is applied to the study of the physical facts underlying music, psychology to the study of the reactions to it of the human organism.

1. Musical Sounds

Sound is a sensation produced by vibrations in the air or in more solid resilient substances, which, gathered by the outer ear, are conducted to the nerves of the inner ear and through the auditory nerves, and even through the sensory nerve system, to the brain, making an impression there on the perceiving mind corresponding to the nature of the occasion of the vibrations.

These vibrations must be produced by the sudden application of energy of some kind,—percussion, plucking or stroking of strings, sudden currents of air and the like.

Vibrations are transmitted by waves of different lengths and force passing through the air or other elastic substances. These waves are analogous to waves on the surface of water, but are in three dimensions instead of one. The complete oscillation, forward and backward, is accounted a wave, but is sometimes called a double wave.

The human ear recognizes these vibrations only within certain limits. Vibrations under 16 per second and over 38,000 per second cease to be heard.

When these occasions of vibration act irregularly, noise is produced. When they act regularly, on an elastic, homogeneous, and symmetrically defined or shaped body, whether solid or aerial, the result is an agreeable sensation which is called a musical sound. Regularity of vibration is essential to musical sound.

2. Variations of Vibration

The vibrations of an elastic sounding body have three distinct variations,—(*a*) rapidity of vibration, (*b*) extent of vibration, and (*c*) form of vibration. The first is recognized as "pitch," the second as "force" or "loud-

ness," the third as "character" or "colour," or "timbre." All these will depend on the vibrational character of the sounding body and of the transmitting medium.

(*a*) *The Pitch of Musical Sound.* The accepted standard of pitch is C in its different positions. C below the bass staff has 64 vibrations per second, C in the second space of the bass staff has 128 vibrations; C on the added line above the bass staff and the added line below the treble staff, often called middle C, has 256 vibrations; C on the third space of the treble staff has 512 vibrations and so on. It will be noticed that the vibrations increase in geometrical ratio, doubling with each octave.

The figures given above represent what is known as "philosophical pitch," but in actual performance there is considerable variation, the vibrations of treble C ranging from 500 to 540 vibrations per second depending on the age and the locality. The French standard is 517 vibrations per second for treble C which is now used in this country, where it is known as International Pitch, having been officially adopted by the Piano Manufacturers' Association of the United States. Older instruments still occur having the old Concert Pitch of 540 vibrations per second.

Any difference in the number of vibrations per second will produce a corresponding difference of pitch. The human ear at its best will recognize a difference of one-fiftieth of a half step or 600 distinguishable sounds in an octave. Ordinary ears may easily distinguish from 50 to 100 sounds in the octave.

(*b*) *The Loudness of Sound.* As the velocity of sound is 1100 feet per second and as the number of vibrations of treble C is 512, we find its invariable wave length to be 2.129 feet. The difference between a loud and soft

tone will not be in the length of the wave, therefore, but in its power or intensity, and depends on the force employed to produce the vibrations. This intensity diminishes theoretically as the square of the distance, but in practice much depends on the conditions of the transmitting medium.

(*c*) *Timbre or Tone Colour.* The difference in the *quality* or *character* of musical sounds is apparent to every normal ear. The violin, the flute, the drum,—each has a distinctive quality of tone. Until the time of Helmholtz's study of the problem, the reason for this difference of tone colour was unknown. He discovered that it was due to a difference in the character of the overtones associated with the fundamental tone.

If the lower overtones were prominent and the upper overtones weak, the tone was smooth and mellow, perhaps lacking in brilliancy; if the lower overtones were absent and the higher prominent, the tone was brilliant and even shrill. The various combinations of these overtones, low, medium and high, account for the difference of tone colour or *timbre*.

3. The Overtones

These overtones are occasioned by the division of the vibrating string, column of air, or any other vibrating body into two or three or four or even more parts, each of which, in addition to the vibration of the whole (or fundamental tone), vibrates independently, producing an additional set of vibrations, or overtones. The division into two parts gives two overtones, each an octave above the fundamental. Actually, they produce only one tone, the divisions only strengthening their common tone. The division into three parts gives an overtone of a twelfth, or an octave plus a fifth, above the

fundamental tone. Four parts give an overtone two octaves higher. The series goes on to sixteen parts, beyond which the overtones cannot be distinguished by the most sensitive ear, although they undoubtedly exist. By analysis of the tone into its component parts, most people can distinguish the lower overtones; but whether they can separate them or not, they do perceive the resultant quality produced by them.

4. The Control of Tone Colour

The nature of these overtones can be controlled to a great extent in the various instruments. The attractiveness of tone of some pianos is due to a skillful and pleasing combination of them. The different tone colours of the stops of the organ are produced by devices that vary the combinations of overtones. The difference in the quality of tone in various organs is due to the varying skill of their several manufacturers. The quality of a human voice may be greatly improved by a skillful voice teacher, changing the combinations of overtones produced by the voice.

These overtones may be suppressed either in part or as a whole by various devices and methods. The suppression of the higher discordant overtones adds to the charm of the tone; but if all the overtones are removed, the fundamental tone becomes dull and lifeless. Stopping the end of an organ pipe prevents almost all overtones. Hence the Bourdon, or the Stopped Diapason, has a hollow, weak quality of tone compared with a stop with open pipes.

It is possible in the piano to exclude the seventh and ninth overtones which are inharmonic, that is, discordant, and so improve the tone. On some stops of the organs even the third and fifth overtones are also

excluded as well as the higher *inharmonic* overtones, thus securing a purer tone.

By adding other pipes or other instruments corresponding in pitch to the overtones they may be greatly strengthened, as in an organ or orchestra. In an organ this is done, in addition to pipes an octave or two octaves higher than the fundamental tone, by mixtures containing twelfths, seventeenths and higher tones corresponding to the higher overtones. These add brilliance and sharpness to the organ. They are found in the organs of Roman Catholic churches rather than in those of Protestants.

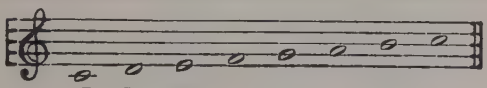
These sound waves of fundamental tones and overtones are so related mathematically that until the extreme upper overtones are reached, they coincide in part, producing an exceedingly complex tone wave, not a series of independent tone waves. The form of this complex wave impinging on the aural nerve gives the characteristic sensation we call *timbre* or tone colour. This nerve, however, has the extraordinary power of analyzing all these compound waves and hearing them separately, if the mind concentrates its attention upon them.

5. The Formation of the Scale

(*a*) *Finding the Scale.* There are more rather than less than 50 different tones distinguishable by the normal ear between middle C and treble C; which of these shall we select in our series of tones from one C to the octave above? The great mass of them do not seem to have any relation to each other and are excluded from the series by human beings of every age and race. Helmholtz explains their exclusion psychologically: that being separated from each other by very small intervals,

difficult to be distinguished, and, even when further separated, without easily apprehended intervals or apparent relation to each other, the human mind rejects these in favour of the tones whose intervals are quickly grasped and which have definite relations to each other.

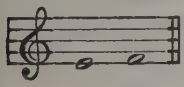
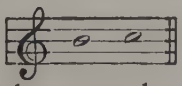
(*b*) *The Diatonic Scale.* The series that has had in whole or in part the almost unanimous acceptance of the human race is what is known as the Diatonic Scale.



C D E F G A B C

Flutes discovered in Egypt among the objects of the Bronze Age, 3000 B. C., were so constructed as to produce this series of tones.

It will be noticed that the half steps occur between E and F and B and C. The other intervals are whole steps.[2]

That there are slight variations is to be expected. The difference between the Lydian Diatonic Scale and our own is slight and is based on harmonic considerations. The difference in the half step between E and F  is four vibrations per second and between B and C  six vibrations, the Greek half steps being by so much smaller.

(*c*) *Reached by Scientific Methods.* The results of the musical instinct of the race has found a scientific justification.

We have found the rising series of C's have not only

[2] The ancient nations and many contemporary savage tribes such as the Bushmen of Australia, begin their scales at the top and descend instead of at the bottom and ascend, as do ours.

a clear and definite mathematical relation, but that they are concordant, because their several vibrations coincide and reinforce one another. In discussing the overtones, we found the fifth and third showing a somewhat similar mathematical relation to the fundamental tone, being concordant with it and enriching its quality. This gives us two tones, G and E, lying between C and C having relation to them. Taking these tones as a new basis of relations we get D and B. By a reverse process we secure A and F, the rest of the scale.

(*d*) *The Intervals of the Diatonic Scale.* The intervals between the tones of this scale are of two kinds, whole steps and half steps. In some nations and ages, there have been accepted one-fourth and one-third steps, but they are exceptional. The order of the tones in the series and the intervals between them are as follows:

C	whole step	D	w. s.	E	half step	F	w. s.	G	w. s.	A	w. s.	B	h. s.	C.
1		2		3		4		5		6		7		8

The white keys of the piano and organ represent this scale very tangibly.

As we shall see later, the scale did not always begin with C, but also on D and E and F and G. The intervals between these tones designated by these letters always remained the same, so that these scales, or partial scales, differed very remarkably in the location of the half steps. It is interesting to note that the Greeks and the early Christian Church knew our modern scale (the Lydian Mode), but its more serious musical leade s deprecated its use as lascivious!

(*e*) *Importan e of Individual Notes.* It must not be overlooked that the first note of the scale is of commanding importance. It is the beginning and its octave the end of the series. All the other notes have their relationship to the scale based on their relationship to the first note or tonic.

The perfect and concordant relation to it of the fifth makes that note next in importance and hence it is called the *dominant*. This was true before the introduction of harmony which has greatly enhanced its importance. The fourth, being an inversion of the fifth, comes next in importance, both melodically and harmonically, and hence is known as the *subdominant*.

6. Additional Scales

(*a*) *The Minor Scale.* In addition to the above scale on C another scale based on A is used.

A w. s. B h. s. C w. s. D w. s. E h. s. F w. s. + h. s. G♯ h. s. A

This scale is called the minor scale because the interval between A and C is a minor third while the preceding scale is called the major scale because the interval between C and E is a major third. The minor scale given above is known as the harmonic minor scale; had the F been sharped, it would have been the melodic minor scale.

(*b*) *The Pentatonic Scale.* There is a third scale still in occasional use (though chiefly in antique folk-songs), known as the Pentatonic Scale.

C w. s. D w. s. E w. s. + h. s. G w. s. A w. s. + h. s. C.

It can be played on the black keys of the piano beginning on G♭ or on the open tones of wind instruments. It is a survival of an aboriginal scale found all around the world. The Chinese know and use the pentatonic and heptatonic scales, as do also the natives of Java. They were based on the open strings of instruments and openings on wind instruments. It does not follow that the people using the pentatonic scale did not know and

use the other two tones of the diatonic scale; but they used them as we do the chromatic tones of the present scale, always considering the main scale essential and the other tones accidental.

(*c*) *The Whole Step Scale.* In recent years another scale has been introduced by composers like Debussy and d'Indy, seeking new effects whose intervals consisted wholly of whole steps, leaving out the seventh.

C—D—E—F♯—G♯—A♯—C.

It is interesting to note that this scale, favoured by the most advanced composers of our day, was in use among the aborigines of Sumatra.

While this scale makes possible unusual harmonic combinations of a nerve-irritating character, its range of expression is very limited and the music becomes monotonous after the bizarre effect loses its novelty.

(*d*) *The Chromatic Scale.* If we proceed through the octave between C and C dividing the whole steps in the series into half steps, we find five tones more which are not used in the Diatonic Scale based on C. They are represented by the black keys on the piano. Hence we have C—C♯—D—D♯—E—F—F♯—G—G♯—A—A♯—B—C; or in equable temperament tuning, as found in the piano, C—D♭—D—E♭—E—F—G♭—G—A♭—A—B♭—B—C. This series is known as the Chromatic Scale. It is used as a theoretical basis for the transposition of scales, and episodically in actual music.

REVIEW QUESTIONS

1. What two fundamental acquirements must be made as a preliminary to an intelligent study of music?
2. What is sound and how does it become musical?
3. How do sound waves differ from waves in water?
4. What are the limitations of hearing?

5. What are the three variations in sound vibrations?

6. What is the accepted standard of pitch and what its vibrations in its different positions?

7. What is International Pitch? Concert Pitch? What is the difference of vibration for treble C?

8. What variations of pitch can be distinguished by a trained ear? What by an ordinary ear?

9. What variations in the vibration affects the loudness of a tone?

10. Explain the difference in tone quality or colour.

11. How are overtones, or partial tones, produced?

12. Can these overtones be controlled, and what is the result?

13. What is the nature of a tone wave modified by overtones?

14. How was the scale formed?

15. What is the Diatonic Scale? What are its intervals and how are they placed?

16. What are the more important notes of the scale?

17. What other scales are used? How do they differ from the Diatonic Scale?

V

THE PHYSICAL ELEMENT IN MUSICAL SOUND
(*Continued*)

Class Room Suggestions: In the study of the transposition of scales and of intervals, it will be wise to have some competent person play the notes in order to teach the ear. Blackboard work will also be useful in training the eye to observe.

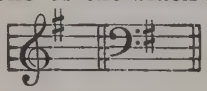
7. Transposition of the Scales

If we desire to construct a regular major scale on any other tone than C, we find it impossible on the white keys, for the half steps do not occur at the right places, *i.e.*, between 3 and 4 and 7 and 8. But if we correct the difficulty by the use of the chromatic tones, *i.e.*, the black keys, the way is easy.

Basing the scale on G we have the following:

G w. s. A w. s. B h. s. C w. s. D w. s. E w. s. F♯ h. s. G,
1 2 3 4 5 6 7 8

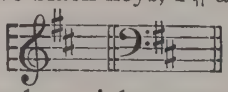
using one of the black keys, F♯. The signature is one sharp.



Seeking the scale on D the result is as follows:

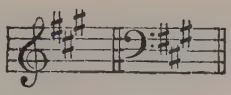
D—E—F♯—G—A—B—C♯—D,
1 2 3 4 5 6 7 8

using two black keys, F♯ and C♯. The signature is two sharps.



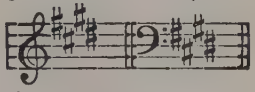
The scale on A becomes:

A w. s. B w. s. C♯ h. s. D w. s. E w. s. F♯ w. s. G♯ h. s. A.
1 2 3 4 5 6 7 8

The signature is three sharps. 

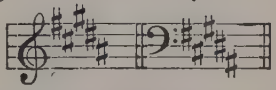
Building the scale on E we secure:

E w. s. F♯ w. s. G♯ h. s. A w. s. B w. s. C♯ w. s. D♯ h. s. E.
1 2 3 4 5 6 7 8

The signature is four sharps. 

The scale proceeding from B is as follows:

B w. s. C♯ w. s. D♯ h. s. E w. s. F♯ w. s. G♯ w. s. A♯ h. s. B.
1 2 3 4 5 6 7 8

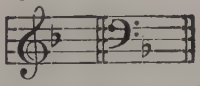
The signature is five sharps. 

The scales may be built on the sharp chromatic tones (semi-tones) of the C scale, those foreign to its normal scale, but they become complicated in notation and are rarely used except in passing phrases.

The foregoing scales have regarded the five chromatic tones as sharps. Considering them as flats, the following scales may be constructed.

That on F is as follows:

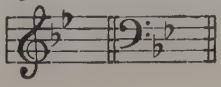
F w. s. G w. s. A h. s. B♭ w. s. C w. s. D w. s. E h. s. F.
1 2 3 4 5 6 7 8

The signature is one flat. 

In flats the flat chromatic tones appear as the tonics of regular major scales.

Beginning on B♭ we get the following scale:

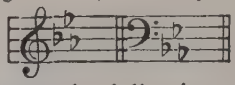
B♭ w. s. C w. s. D h. s. E♭ w. s. F w. s. G w. s. A h. s. B♭.
1 2 3 4 5 6 8 8

The signature is two flats. 

The scale on E♭ works out as follows:

E♭ w. s. F w. s. G h. s. A♭ w. s. B♭ w. s. C w. s. D h. s. E♭.
1 2 3 4 5 6 7 8

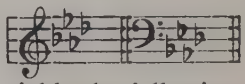
The signature is three flats.



The use of A♭ as tonic produces the following:

A♭ w. s. B♭ w. s. C h. s. D♭ w. s. E♭ w. s. F w. s. G h. s. A♭.
1 2 3 4 5 6 7 8

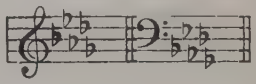
The signature is four flats.



Using D♭ as basis of a scale yields the following:

D♭ w.s. E♭ w. s. F h. s. G♭ w. s. A♭ w.s. B♭ w.s. C h.s. D♭.
1 2 3 4 5 6 7 8

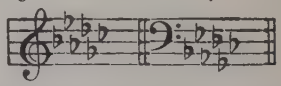
The signature is five flats.



The scale of G♭ is as follows:

G♭ w. s. A♭ w. s. B♭ h.s. C♭ w.s. D♭ w.s. E♭ w.s. F h.s. G♭.
1 2 3 4 5 6 7 8

The signature is six flats.

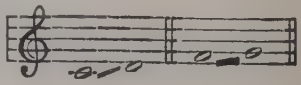


The notation and playing of this scale is so complicated that it is rarely used except in passing phrases. The C♭ on an instrument is the same as B.

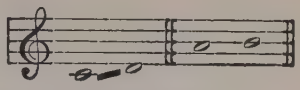
8. Intervals

These scales are used as melodic measuring rods to mark the position of each individual note composing them. The difference of pitch between any two is called an *interval*. As these intervals differ, they have separate names.

The *second* is the distance between two consecutive notes in the scale,—C to D, or F to G, for instance.

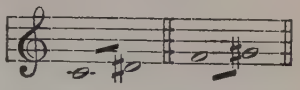


A *major second* is a full step. C to D, or A to B.

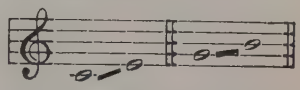


A *minor second* is a half step. C♯ to D, or E to F.

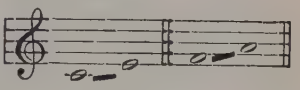
An *augmented second* consists of one whole step and a half step. C to D♯, or F to G♯.



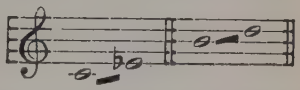
The *third* is the interval between alternate notes such as C to E, or G to B.



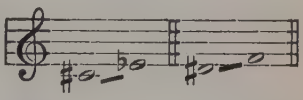
The *major third* consists of two whole steps. C to E, or F to A.



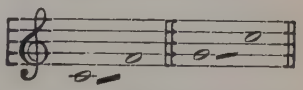
The *minor third* consists of a whole step and a half step. C to E♭, or B to D.



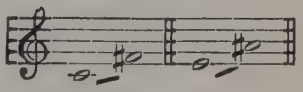
A *diminished third* consists of two major half steps. C♯ to E♭, or D♯ to F.



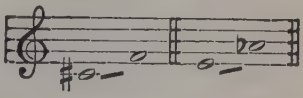
A *perfect fourth* consists of two whole steps and a half step. C to F, or G to C.



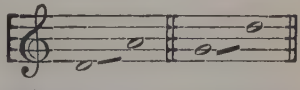
An *augmented fourth* consists of three whole steps. C to F♯, or E to A♯.



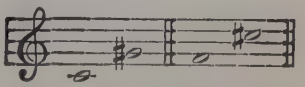
A *diminished fourth* consists of one whole step and two half steps. C♯ to F, or E to A♭.



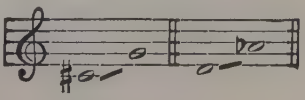
A *perfect fifth* consists of three whole steps and one half step. D to A, or G to D.



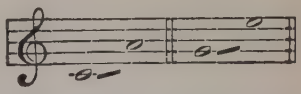
An *augmented fifth* consists of four whole steps. C to G♯, or F to C♯.



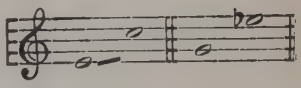
A *diminished fifth* consists of two whole steps and two half steps. C♯ to G, or D to A♭.



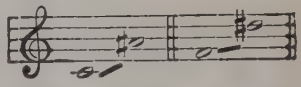
A *major sixth* consists of four whole steps and one half step. C to A, or G to E.



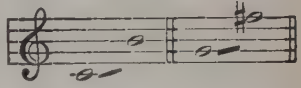
A *minor sixth* consists of three whole steps and two half steps. E to C, or G to E♭.



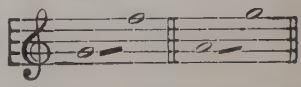
An *augmented sixth* consists of five whole steps. C to A♯, or F to D♯.



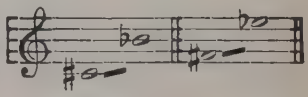
A *major seventh* consists of five whole steps and one half step. C to B, or G to F♯.



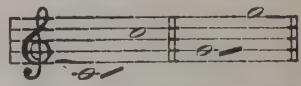
A *minor seventh* consists of four whole steps and two half steps. G to F, or A to G.



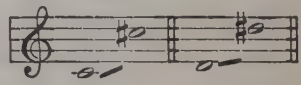
A *diminished seventh* consists of three whole steps and three half steps. C♯ to B♭, or F♯ to E♭.



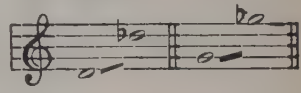
A *perfect octave* consists of five whole steps and two half steps. C to C, or G to G.



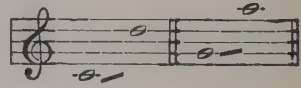
An *augmented octave* consists of six whole steps and one half step. C to C♯, or D to D♯.



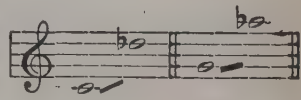
A *diminished octave* consists of four whole steps and three half steps. D to D♭ or G to G♭.



A *major ninth* consists of six whole steps and two half steps. C to D an octave above, or G to A an octave above.



A *minor ninth* consists of five whole steps and three half steps. C to D♭ an octave above, or G to A♭ an octave above.



The nomenclature for greater intervals follows the rules already exemplied.

9. The Inversion of Intervals

These intervals may be inverted by proceeding down as from C to G below with the following results:

The seconds become sevenths;
The thirds become sixths;
The fourths become fifths;
The fifths become fourths;
The sixths become thirds;
The sevenths become seconds.

It will be noted that a minor interval is a half step less than a major, and a diminished interval a half step less than a minor or perfect interval. The major intervals by this inversion become minor and the minor major; the augmented become diminished, and the diminished augmented.

10. Melody

A melody is any series of notes of the scale having design and expressing a musical idea. Notes taken merely at random do not constitute a musical idea, for they express nothing and show none of the relationship constituting a design.[1]

A melody does not necessarily have form,—a beginning, a middle and an end. The old recitatives of the Hebrews, Egyptians, Greeks and the Early Church were formless and vague, but were none the less melodies.

[1] Bach wrote a fugue on the letters of his name B♮, A, C, H (Germans use H for B natural), a theme in itself hardly deserving the name of melody, for aside from the extrinsic consideration of personality, there is no expressional value and no inherent design. The composition had interest as a *tour de force,* showing the great contrapuntal master's skill, rather than as a genuine musical composition, harking back to the mediæval polyphonal puzzles.

The endless melodies of Wagner are another case in point.

Not every melody is a tune, although every tune is a melody. Music may be very melodious, like Wagner's "Waldweben" in "Siegfried," and yet be tuneless, for a tune is a melody cast into a definite form, having a definite tonality or key, and a definite number of measures symmetrically arranged, and having imperfect and perfect cadences to make the relation of the different parts clear. A melody may have only the length of a measure, nothing but a phrase, while a tune generally has four measures or multiples of four. It must have a unity growing out of the repetition of its fundamental design in a symmetrical way and in its balance of rhythm as well.

II. Rhythm

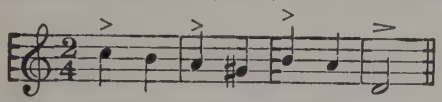
There are two elements in rhythm, time and the regularly recurring accent or stress on certain tones that marks its progress in time. The nervous system responds to these recurring accents, for each of them is a shock. The nervous effect will depend on the force of the extra stress on the accented note; the harder the beat of the drum, the more the nervous excitement grows. Another element in the nervous effect is the frequency of these nervous shocks. The greater the speed the more exciting the rhythm.

Rhythm is inherent in the human mind. Into an unmarked regular succession of equal sounds the mind imports a rhythm, as in the ticking of a clock or the clicking of the rails of equal length under the wheels of a flying train. It is the same impulse that leads men to count by tens or by dozens, or to measure distance by miles or kilometers. There are rhythms in human

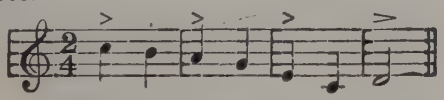
speech, and in prose, as well as in poetry. When we speak of a smooth style, we not only include the clearly evident interrelations of words and phrases, but also the smoothly regular rhythmical flow of words, whether sounded aloud or merely followed in thought.

It is not only one of the charms of music, but one of its appeals to the human nerves that its tones follow each other in a regularly recurring way. Until a rhythmical design can be injected into constantly but irregularly occurring sounds they are actually distressing to the nerves, and we construct a rhythmical series out of them in sheer self-defense.

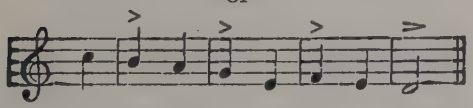
There are two fundamental rhythms in music, in *duple* and *triple* time. Duple rhythm accents every other note whether in 2/2, 2/4, 4/4, 2/8, or 4/8 time.



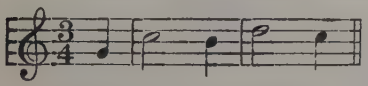
It matters not whether the accent is on the first or the second note.



or



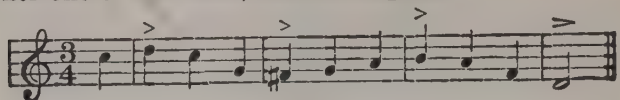
In the ancient 3/4 time, it was often essentially duple for



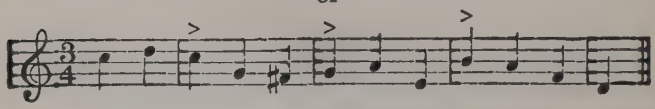
is but emphasizing the accented note a little more.

Triple rhythm stresses one note out of a series of three, whether in 3/2, 3/4, or 3/8 time.

Here again it is possible for the accent to be placed on either one of the three, as the foregoing, or



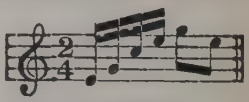
or



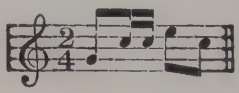
Then there are compound rhythms made up of the duple and triple time as in 6/8 and 12/8.

Here are two beats to the measure with the accent on the first, and in so far it is duple time; but under each beat there are three tones with the accent on the first of each three which is triple time. In 9/8 time we have a double triple time and in 12/8 we have duple time again with subordinate triple time. A still more complicated rhythm is 5/4 or 5/8 time where half the measure is duple and the other half triple time. This is rarely used.

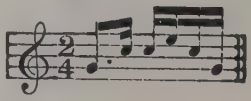
But this does not by any means exhaust the rhythmical possibilities. There is almost infinite variety secured by breaking up the notes within the measure into shorter notes. As example, we have in duple time



or

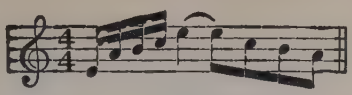


or

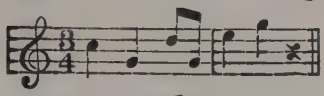


or in 4/4 time

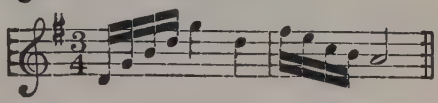
or



or in 3/4 time



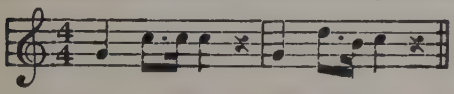
or



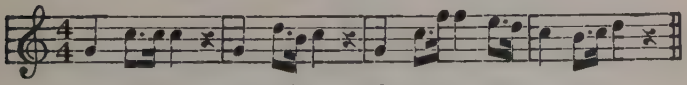
The more intricate these rhythmical variations, the more difficult they are to follow, and, consequently, the less pleasing they will be to the untrained ear; on the other hand, the nervous system and mind trained to analyze and so comprehend these complicated series of nervous shocks will take pleasure in them.

12. Form

Out of the same impulse of the human mind, which injects rhythm into regularly recurring sounds, grows the organization of the recurring notes first into a phrase,



then into a period,



and so on into more elaborate forms.

While by no means peremptory, the form of a composition is based on a unit of four measures whose multiples outline the form of the composition. This is particularly true of vocal music, for in instrumental music the form is much more free. The song form is that used in most sacred music. The primary melody is developed in eight or sixteen measures; a second melody in a related key and in probably different time for the sake of contrast, is given in eight or sixteen or

even thirty-two measures; this is followed by a return to the primary melody in the original key, and time in eight or sixteen measures. This model is by no means rigidly observed, as the second movement may be replaced by two subordinate movements and the closing movement may contain material not found in the first.

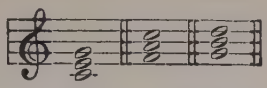
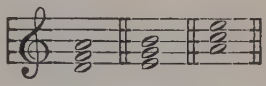
13. Harmony

As we shall see later the ancients did not cultivate harmony, but sang and played only the melody in unison. Harmony is a comparatively modern form of music, not much over four hundred years old.

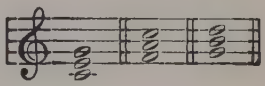
Harmony is the resultant of sounding tones of different pitch at the same time. Certain tones so sounded are concordant, that is, are agreeable to the ear. Other tones when sounded together are discordant, that is, they are disagreeable or painful.

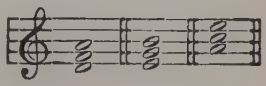
Tones related, as are the fundamental tone and its lower overtones, are concordant. Tones not so related are discordant. The tones separated by the "perfect" intervals, the fifth and the fourth, are most concordant. The thirds and sixths are less so, but are still recognized as concordant.

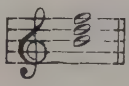
The foundation of harmony lies in these concordant tones; but the discords have an important place, as, in the first place, they provide contrast and piquancy to the concords, and, in the second place, serve as transitions from one concordant chord to another. While they irritate the nerves temporarily, by that irritation they stimulate them and make them more susceptible. Concords, unless modified by rhythm and speed, calm the nerves and express serenity and peace. Discords express passion, fear, horror, as they irritate and distress the nerves.

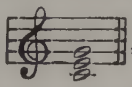
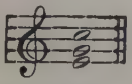
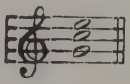
1. The fundamental chord is the triad: the tonic, the third and the fifth,  If the third is a minor third we have the minor triad. 

2. These triads may be built upon any note of the scale.

The *major triads* are based on C, F, G, or on 1, 4 and 5 of any transposed scale. 

The *minor triads* are based on D, E, and A, or on 2, 3, and 6 of any transposed scale. 

The triad based on B or on 7 of any transposed scale is a *diminished triad*,  because its fifth is a diminished fifth.

3. These triads may take three positions, the original based on the tonic,  , the inversions based on the third  , or on the fifth  . As the colour value of these inversions is quite different, they add to the movement and the variety of the harmonic development.

4. The passing from one key or tonality to another in the course of a composition is called a *modulation*, and is indicated by the use of sharps or flats as accidentals, changing the scale as may be required.

Space forbids a discussion of the rules for the progression of the chords. In passing, it may be said that

consecutive octaves and fifths with certain exceptions are forbidden, for reasons both acoustical and æsthetic.

REVIEW QUESTIONS

1. May the Diatonic Scale be based on any other letter than C? If so, how can it be done?
2. Give the letters of the scale and their intervals when based on G, on D, on A, on E, on B, and their respective signatures.
3. Give the letters of the scale and their intervals when based on F, on B flat, on E flat, on A flat, on D flat, on G flat, and their respective signatures.
4. What is an interval?
5. Give the names of the intervals up to and including the fifth.
6. Give the names of the rest of the intervals.
7. What changes occur when intervals are inverted?
8. What is the difference between a melody and a tune?
9. What are the two elements of rhythm?
10. What two fundamental rhythms are there in music?
11. What are compound rhythms?
12. How are further rhythmical variations secured?
13. What is the basis of form?
14. What is the usual unit in form?
15. Give the usual model of a simple vocal composition.
16. What is harmony?
17. What are concords and discords, and the acoustical basis of their separate character?
18. What is the fundamental chord?
19. State the three kinds of triads and their difference.
20. Give the three positions of these triads.
21. What is modulation?
22. What consecutive intervals are forbidden?

VI

MUSICAL NOTATION

Supplementary Reading: Any book of Musical Elements: Hymnal; miscellaneous vocal and instrumental music.

THE progress of musical development was delayed thousands of years by the lack of a method of expressing musical facts and ideas on the written page. When the musical notation began to be somewhat adequate the development of the science and art of music was greatly accelerated, for the progress of a generation or of an individual could be passed on as a starting point for the next generation in a concrete and visible form. Moreover, an idea lying unexpressed in the mind is by no means as proliferous as one objectivized and made visible on paper.

In a later chapter the slow and laborious path of the development of notation will be followed and its difficulties made plain. We shall then better appreciate the value and importance of our heritage of musical notation.

There are three elements in music which need definite formulation and notation: Pitch, Time, and Expression.

1. THE NOTATION OF PITCH

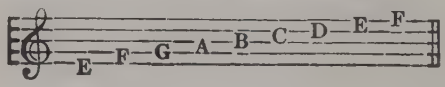
Notes are symbols of sound. 𝅝 𝅗𝅥 𝅘𝅥 𝅘𝅥𝅮 𝅘𝅥𝅯 𝅘𝅥𝅰 represent each an individual sound. *Rests* represent silence, 𝄻 𝄼 𝄽 𝄾 𝄿 etc. It is to be remembered that it is the head of these notes that represents sounds.

The problem is to represent the exact pitch of these sounds to be noted. This is done by means of a *staff* consisting of five lines with short added lines, called *leger lines*, above and below. Each line and space represents a different pitch.

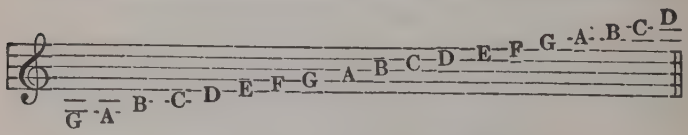
The exact pitch is established by a sign at the beginning called a *Clef*.

There are three clefs in general use:

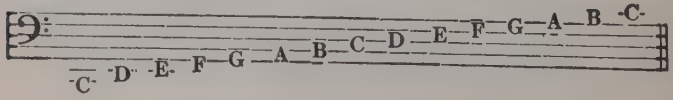
(*a*) *The G Clef*. The G Clef is so called because the horizontal line that bisects its circular curve is established as representing G, a fifth above Middle C. This establishes the other letters and their corresponding pitches as well, and we have the following:

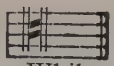
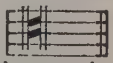


By adding lines above and below, we get the following:



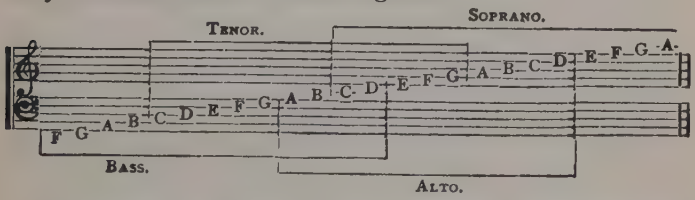
(*b*) *The F Clef*. The F Clef is so called because the line passing through the dot at the top is established as representing F, the fifth below Middle C. The following staff with an F clef indicates the pitch of tones below Middle C.



(*c*) *The C Clef.* The C Clef  is so called because it establishes Middle C. While the F clef is permanent and the G clef is rarely changed, the C clef is movable to adopt the staff to the range of different voices and different instruments. The tenor voices still use the C clef on the third space;  some publishers, however, with a strange persistence in error, use the G clef for the tenor, although it is an octave too high. In instrumental notation the C clef has still other positions: violoncello and trombone on the fourth line, and viola on the third.

When the C clef is on the third space the lines and spaces have the same letters as when the G clef is used, but an octave lower.

(*d*) *The Range of Human Voices.* The range of the human voice is covered by the G clef and the F clef, as may be seen from the following chart:



(*e*) *Sharps and Flats.* The foregoing has been confined to the diatonic tones of the scale of C. If we wish to use the chromatics, C♯ (D♭), D♯ (E♭), F♯ (G♭), G♯ (A♭) and A♯ (B♭) we must use the two signs already indicated, the sharp (♯) which indicates a tone a half step higher, or the flat (♭) which indicates a tone a half step lower.

Sharps and flats are used at the beginning of a composition or movement and are called *signatures*, and are used to indicate the transposed keys.

No signature,	the key of C.		
One sharp,	the key of G.	One flat,	the key of F.
Two sharps,	the key of D.	Two flats,	the key of B♭.
Three sharps,	the key of A.	Three flats,	the key of E♭.
Four sharps,	the key of E.	Four flats,	the key of A♭.
Five sharps,	the key of B.	Five flats,	the key of D♭.
		Six flats,	the key of G♭.

These sharps and flats in the signature affect every note in every octave on the letter so sharped or flatted.

When sharps and flats and naturals are used in the course of music for modulation or passing chromatic tones they are called *accidentals*. Their value is confined to the line or space on the staff on which they occur and to the measure in which they appear. The only exception is when a note so modified is connected by a tie ⌒ to the first note of the next measure, when the force of the accidental is continued.

If it is desired to neutralize such an accidental on the line or space and in the measure in which it is used the *natural* (♮) is used. When the signature is in sharps, the natural as an accidental has the effect of a flat; when in flats, the value of a sharp.

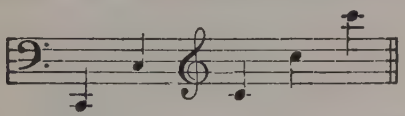
Cautionary accidentals are occasionally used where there is danger of the force of a previous accidental being overlooked. But they are frequently overdone, particularly in European music.

(*f*) *Absolute and Relative Pitch.* The letters indicate absolute pitch: Middle C is always middle C, no matter in what scale or part it appears.

Relative pitch, indicating the position of a note by the various scales, is notated by the numerals, 1, 2, 3, 4, 5, 6, 7, 8, or by the Italian syllables, do, re, mi, fa, sol, la, si, do. The "do" is replaced by "ut" by the French and "si" by "ti" by Americans. From "mi" to "fa" and

from "si" to "do" are half steps. The intervals between the other syllables are whole steps. When an accidental occurs the name of the syllable is changed. In the case of sharps from do to di (dee), re to ri, fa to fi, sol to si and la to li. In flats the change is from do to de (day), re to rä, mi to me, sol to se, la to le and si to te. By firmly associating these intervals with their corresponding syllables until the action becomes unconscious or automatic, the singing by note becomes as easy as reading any other print.

(*g*) *Notation of the Several Octaves of Absolute Pitch.* There are several systems of notating by letter the pitch of the several octaves. Here are some of them:



C C—	C—	c—	c′—	c″	etc.
C—	c—	c′—	c^2—	c^3	etc.
C—	C^2—	C^3—	C^4—	C^5	etc.
C—	c^0—	c′—	c″—	c‴	

The letters following in each octave conform to its initial C. The pity is that some method has not been standardized.

2. The Notation of Time

The notation of the time value of notes is important from two considerations: the proper placing of the accents which mark the rhythm and the facilitating of the singing or the playing of several voices or parts in perfect coördination.

(*a*) *The Length of the Notes.* The length of the notes is indicated partly in one way, partly in another: the shape of the notes, as 𝅝 for the whole note, ♩ for the quarter note, and the stem and flags associated with

them, 𝅗𝅥 for a half note, ♩ for a quarter note, ♪ for an eighth note, 𝅘𝅥𝅯 for a sixteenth note, 𝅘𝅥𝅰 for a thirty-secondth note, etc.

The notation of rests is somewhat similar: 𝄻 for a whole rest, 𝄼 for a half rest, 𝄽 for a quarter rest, 𝄾 for an eighth rest, 𝄿 for a sixteenth rest, 𝅀 for a thirty-secondth rest. A dot immediately following a note or rest adds one-half to its length: 𝅗𝅥. equals a half plus a quarter; ♩. equals a quarter plus an eighth; ♪. equals an eighth plus a sixteenth. The same is true of rests.

The stems may extend up or down and the flags right or left, depending on the part or the location of the note on the staff. One stem may have two or more notes. When a note has two stems it indicates that it belongs to two parts. When several notes are to be sung to one syllable the slur is used. When the notes are eighths or smaller, the slurs are absorbed in the flags. In instrumental music the flags are changed to bars either within the beat or in two beats, to make the time relations easy to comprehend. Sometimes the slur is used to indicate the combination of notes into phrases.

The slur becomes a *tie* when it binds together two notes in the same degree.

When the progress of the rhythm is suddenly to be suspended, the pause, or hold, 𝄐 is used.

The absolute time value of a note is not dependent on its form. does not necessarily have twice the speed of ♩ ♩ ♩ ♩. Indeed in different compo-

sitions they may have the same speed. Eighth notes in piano music are usually fast; in sacred music, they may be quite slow. That is to say, the time element in printed notes expresses relative periods of time, not speed at all.

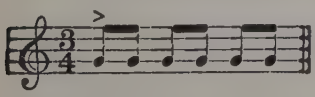
(*b*) *Division into Measures.* In order to facilitate perfect time coördination and to bring out the rhythm by placing the accent on the proper notes, written music is divided into measures. These subdivisions are indicated by bars across the staff. Measures may be of different lengths. The simple measures contain two half notes (2/2), two quarter notes (2/4), two eighth notes (2/8), or three half notes (3/2), three quarter notes (3/4), three eighth notes (3/8), or four half notes (4/2), four quarter notes (4/4), four eighth notes (4/8), representing duple, triple, or quadruple time (which latter is essentially duple time).

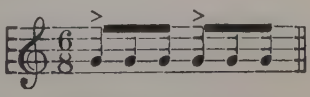
The compound duple measure has six fourth notes (6/4), or six eighth notes (6/8), with three notes to each beat.

The compound triple measure has nine quarter notes (9/4), or nine eighths (9/8), with three notes to each beat.

The compound quadruple time contains twelve quarter notes (12/4), or twelve eighth notes (12/8), each with three notes to a beat.

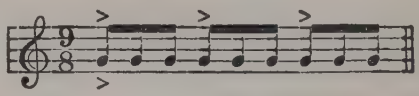
The character of the measure does not entirely depend on the total length of its notes. Three-four and six-eight measures, for instance, have the same time content, but have different accents.



and


The measure is useful also in making clear where the accents are to fall. The first note in all measures is

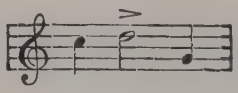
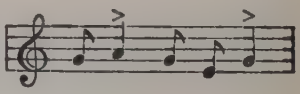
strongly accented; in 4/4 measure the first note on the third beat has a less emphatic accent. In a 3/4 measure the first note on the third beat has a very slight one. In compound time there are two sets of accents: the one just explained and the accents on the first notes of the triple units making up the measure.



The upper figure of the time signature expresses the number of beats or pulses in the measure; the lower figure indicates the standard note of the measure.

The usual method of beating simple time is as follows: 2/4 down, up; 3/4 down, right, up; 4/4 down, left, right, up; the down beat having the strongest accent.

In compound time three notes are counted to a beat, and the beating is the same as in simple time.

In syncopation the accent is shifted from its normal note as in  or 

The sign > shows to what note the accent is transferred. This is not a vulgar modern device, but has been used by the best composers.

There is no fixed relation between the notes and the beats of a measure. A note may correspond to only a fourth or an eighth of a beat, or to all the beats in the measure.

When the first measure of a composition is an incomplete one, the last measure contains only the missing part; *e.g.*, if the first measure has only one beat of a 3/4 measure, the last measure will have the lacking two beats.

3. The Notation of Expression

The effect of the speed and of the force of music on the nerves is very noticeable. A large part of the value of music, therefore, depends on the variations of these, which we call "expression."

(*a*) *The Notation of Speed.* The time indications connected with the notes, we have found, are merely relative; so we must find some other method of indicating actual speed. This we do by prefacing a composition by Italian or other words suggesting various speeds more or less accurately.

Very slow:	Grave, Larghissimo, Largo, Larghetto.
Slow:	Adagio, Lento, Andante.
Medium:	Andantino, Moderato, Allegretto.
Fast:	Allegro, Celere, Veloce.
Very fast:	Vivace, Presto, Prestissimo.

We use Italian words because that language has more words expressive of differing speeds; because these words have been used internationally and have acquired secondary suggestions of quality and manner it would take many English words to express.

But these terms are more or less vague and indeterminate. If the absolute speed is to be expressed we turn to the metronome, a device like an inverted clock, whose pendulum can be lengthened or shortened to a definite scale. The basis of this scale is the number of beats desired to the minute, each oscillation, *i.e.*, each separate movement, accompanied by a click represents a beat. 𝅗𝅥 = 48 means that there are 48 oscillations (resp. beats) to the minute, representing half notes. ♩ = 100 means that there are 100 beats to the minute. This is a very useful instrument, but its use can be overdone.

Music would be quite monotonous if the speed, once determined, should be continued mechanically. We find certain measures that call for greater speed to express growing feeling and we mark them *accelerando* or *accel.* Other measures have a shade of tenderness or calmness, and we mark them *ritardando*, or *rit.*, to show that the speed slows down gradually, or *ritenuto*, or *riten.*, if a slower speed is to be taken suddenly. When the occasion for these deviations from the established speed passes away, we mark the fact by *a tempo.*

There is *ad libitum* or *ad lib.* which indicates absolute freedom in the *tempo. Rallentando* signifies both slacking up of speed and diminution of force in a gradual way. *rall* = *rit* + *dim* is the proper equation.

(*b*) *The Notation of Manner and Quality.* The manner of rendition and the quality of the tone calls for directions which again are expressed by accepted Italian phrases. Here are a few of them, but a phrase book of musical directions will give many more.

Affetuoso, tenderly.
A capella, without instrument.
Con anima, with animation.
Con espressione, with expression
Con spirito, with spirit.
Dolce, sweetly.
Espressivo, with expression.
Largamente, in a large, expansive manner.
Lagrimoso, mournfully.
Maestoso, with majesty.
Religioso, religiously.
Vigoroso, with vigour.

The phrases for quality of tone are:

Sombre timbre, a muffled, hollow quality of voice, expressing gravity, solemnity, fear, horror, etc.

Clear timbre, a bright, open quality of voice, expressing joyfulness, liveliness, tranquillity, etc.

(*c*) *The Notation of Force.* The indication of varying force from soft to loud is given by the following terms:

Piano, p, soft
Pianissimo, pp, very soft.
Pia-pianissimo, ppp, extremely soft.
Mezzo piano, mp, medium soft.
Mezzo, m, medium.
Mezzo forte, mf, medium loud.
Forte, f, loud. *Fortissimo*, ff, very loud.
Forte-fortissimo, fff, extremely loud.

To express increasing force we use, in addition to symbols,

Crescendo, *cres.*, gradually increasing.
Rinforzando, *rf.* or *rfz.*, increasing rapidly.

To express decreasing force we use

Diminuendo, *dim.*, gradually decreasing.
Decrescendo, *decres.*, gradually decreasing.

Other forms of varying force are expressed as follows:

Sforzando, *sf.* or *sfz.*, explosively.
Con forza, with force.
Sotto voce, in an undertone.

Swelling of tone is expressed in the sign

(*d*) *The Notation of Form.* In order to bring out the form relations we have severa devices. Double bars are used to indicate the beginning and end of passages, periods or movements. In many hymnals they are used to mark the end of lines of the hymn.

Dots in all spaces, or only in the second and third spaces, after and before double bars call for repetition of the movement or period between them. The dots after the first double bar in this *repeat* may be omitted. In such a case the repetition begins with the first previous double bar.

Da Capo, *D.C.*, indicates a return to the beginning of the composition, the repeat ending usually with the word *Fine* or end. Sometimes it means a repetition of the whole composition.

Dal Segno, *D.S.*, calls for a return to the sign 𝄋.

The *Brace* is a line at the beginning connecting the staffs on which the several parts of a composition are noted. In simple music having only four parts, it connects only two staffs, two parts being written on each staff. In case an instrumental accompaniment is provided, there are four staffs, two for the voices, two for the instruments. If the vocal parts are somewhat elaborate, they each have an individual staff, and the brace connects four vocal and two instrumental staffs. Some publications add a curved brace for the instrumental staffs to catch the eye of the player.

REVIEW QUESTIONS

1. State the results of a lack of an adequate musical notation.
2. How are individual tones represented?
3. How is exact pitch expressed? What is a clef?
4. What three clefs are used and what is the effect of each?
5. What is the effect of a sharp? of a flat?
6. What is a signature and what is its purpose?
7. What are accidentals? Give the rule of their use.
8. What is the value of a natural?
9. How is absolute pitch represented?
10. What method is used to indicate relative pitch?
11. What makes the notation of time important?
12. How are the time value of notes made plain?
13. How is silence represented?
14. What is the meaning of a dot after a note or rest?
15. What is a slur?
16. What other use has the slur?
17. What and why are measures? How delimited?
18. Explain the different lengths of measures.
19. What compound measures are there?
20. What further use have measures? On what notes in the several measures do the accents fall?
21. What do the figures in the time signature mean?
22. What is syncopated time?
23. How are speed and force expressed?

24. What is a metronome and what does it indicate?
25. How are variations of speed and force represented?
26. How are rendition and quality of tone expressed?
27. What are the principal terms to express degree of force?
28. What are double bars used for?
29. How is the repetition of a passage indicated?
30. What other signs are used to indicate form?

II

THE PSYCHOLOGY OF MUSIC

VII

THE PROBLEM OF THE CHARACTER OF MUSIC

Class Room Suggestions: It may be effective to urge the members of the class to analyze their personal reactions to various kinds of music and so verify by personal experience the propositions of this chapter. It hardly needs to be said that only a minority of the students will have the nervous susceptibility to bring these reactions up into consciousness or near enough to the surface of the subconsciousness to make analysis possible.

Supplementary Reading: Helmholtz, "The Sensation of Sound," Longmans, London; Carl Emil Seashore, "The Psychology of Musical Talent," Silver, Burdett & Co., Boston; Edmund Gurney, "The Power of Sound," Smith, Elder & Co., London; Wallaschek, "Primitive Music," Longmans, London. What little literature there is on this whole subject is rather inaccessible.

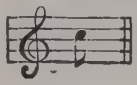
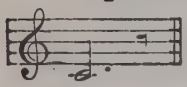
Before proceeding to the more detailed practical discussion of the subject, it is proper that the character, method of operation, and purpose of sacred music should be made clear. A wrong conception here will seriously limit and cripple the musical effort of the church, or even destroy all its practical efficiency.

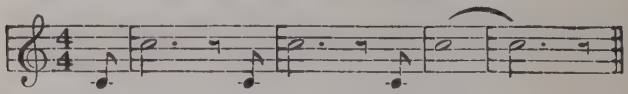
1. The Problem Very Obscure

There are few psychological problems more obscure or perplexing than the mental character of music. Students of the human mind have either found the subject too trivial, or too dependent on musical as well as psychological training for their study and analysis.[1]

[1] Speaking of the psychology of music, William Pole remarks that, "It is only lately that serious attention has been given to this subject by competent writers. It is true that the enormous power of music over the feeling and emotions of mankind has been long known, and has frequently formed the subject of

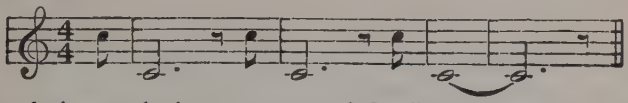
Only here and there, in the psychology of art in general, are hints to be found. Herbert Spencer, who wrote on the origin of music at some length, only went so far on the psychological side as to say that there is "a contrast between the music of coarse exhilaration and the music of refined exhilaration," not noticing that music is not always exhilarating. Helmholtz, in his "The Sensation of Sound" has studied simply the perception of sound in variation. Herbart, the great German philosopher, gave the subject some consideration, but reached a very superficial conclusion.

The mind recognizes differences of pitch, of duration, and of force and accent in the tones that are heard. But this mental apprehension touches only the superficial facts and does not reach the inner relation between tones in which lies the musical idea itself. We hear a sound  and immediately after another sound  The sounds differ in pitch and duration. There may even be a recognition of relation between the pitch of the two tones. But the sounding of these tones separately makes no musical impression upon us. But when we sing or play them one immediately after the other, it makes a musical phrase with a new effect, depending on the order of the tones.



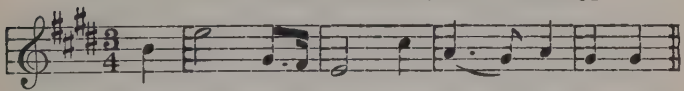
poetical allusions; but the more prosaic attempts to describe or explain it, often by persons ignorant either of music, or of psychology, or both, have usually amounted to little more than high flown sentiment or unmeaning twaddle."—"The Philosophy of Music," p. 15.

is stimulating, inspiring, stirring. Inverting the order of the notes, and changing their length correspondingly, we find that



is calming and gives a sense of finality. There is absolutely nothing in the mere mental facts that should produce this impression. A very simple illustration has been chosen which could be varied and elaborated still more. We should say of it, here is a musical idea. But in what does the idea consist?

2. Illustrations of Lack of Correspondence Between Statement and Musical Effect



Here is a phrase from a famous solo in "The Messiah." Can you impress any one with its musical value by merely telling him the number of vibrations of each of these eleven tones? There does not seem to be any perceptible relation between the mental observation and the actual effect upon the mind. May we not assume that there is none and that the effect is produced in some other way?

Many years ago the writer participated in the learning and rendition of Wagner's "Pilgrim Chorus" from "Tannhäuser." The men had practiced it somewhat with the piano in previous rehearsals with no particular enthusiasm or interest. At the final rehearsal the orchestra came in to assure perfect coöperation at the concert. The hall in which the choral society held its practices was somewhat small with a low ceiling. As the combined men's chorus and orchestra fairly crowded

the room with vibrations, it was exceedingly interesting to see the effect upon all concerned. The conductor, usually remarkable for his poise and self-control, became almost frenzied with physical excitement; many of the singers, strong, stalwart men, showed by their flushed faces, excited gesticulations, rolling eyes, and vibrant singing, how far the music was sweeping them out beyond the bounds of their usual reserve. Just a touch more and we should have had some of the physical results of the old-time revival meetings. The same chorus and orchestra rendered the same music in a large hall where the sound was not confined, with no excitement whatever. The sensory and intellectual elements in the renderings were absolutely the same; whence the difference in effect?

From boyhood up the writer has always heard the overture to "Tannhäuser" with great delight. Yet when a short while before his death Anton Seidl gave it in our city with his orchestra, he added horns at a certain climacteric point and touched a consummate note that so nearly swept the writer off his feet that he barely escaped rising and shouting. Here again the effect was not intellectual, but physical and then psychical.[2]

In the day that Saul joined the ranks of the prophets, it was the music of a company of prophets from the school of Bethel that transported him. It was not until a minstrel played to Elisha that prophetic vision came to him when the Kings of Judah and Israel asked the out-

[2] "The sound of the tam tam, or native drum of the medicine men in Ashuka, West Africa, made many young people ill and they were so excited that they acted like animals running about on all fours and raved. The louder it is beaten, the wilder the jumpings of the males and the more disgustingly indecent the contortions of the women."—Wallaschek, "Primitive Music," p. 106.

come of the proposed war with the King of Moab. Here the preparation was a physical one, not an intellectual, much less a religious one.[3]

3. Physical Basis of Effect of Music

The waves of sound are physical vibrations in which, according to their relative conductivity, all the particles of the body participate. Is it likely that the matter of the extremely sensitive nervous system should not be affected by these vibrations? Edmund Gurney remarks on this point, "Of all formless impressions, sounds can give by far the strongest shock to the organism." He adds, "The eye is always seeing lights and colours and rests contentedly on agreeable masses; while the ear is peculiarly affected and excited by the occasional phenomena which present distinct sound colour."[4]

The traditional blind man characterized scarlet as being like the sound of a trumpet; but he would have found the colour much less stirring than the sound. The difference clearly lies in the distinctly physical character of sound.

4. The Musical Effect Not Limited to the Auditory Nerve

In his phrase "The ear is peculiarly affected" Mr.

[3] "Now we may well admit that music could be capable of inducing such effects as these (prophetic frenzy), and if we ask the cause, it would appear that to finely strung temperaments, music acts as a nervous stimulant, producing parallel effects to those of any other stimulant, first soothing, and, if continued, intoxicating; and then finally comes the reaction, in which the mind recovers its balance, and in its sublime and tranquil exultation the eyes see visions, the ears hear voices, and the tongue utters words that beggar the powers of deliberate expression."—Rowbotham, "The History of Music."

[4] Edmund Gurney, "The Power of Sound."

Gurney seems to assume that the effect of sounds is limited to the auditory nerve. That it is the principal sensory center affected no one will doubt, but recent investigation makes it clear that the whole sensory nervous system is responsive to sounds. Helen Keller, as is well known, is stone deaf. Yet she is conscious of certain nervous effects when music is played in her presence. She can recognize pieces of music previously played; she even recognized a melody sung by her father before scarlet fever closed upon her the principal windows through which the soul apprehends the outer world and holds converse with it. It was said of Laura Bridgman, the Helen Keller of a previous generation, that she perceived the rhythm, loudness and succession of tones. It was then thought through the vibrations of the soil: why not of the surrounding atmosphere?

At one of the State Deaf and Dumb Asylums a boy was noticed by one of his teachers pounding a stone wall with a board. Asked why he did it, he replied that it thrilled him and gave him pleasure. This led to the introduction of drums which greatly facilitated the marching of the students and later to the organization of a brass band which gave concerts that delighted the deaf-mutes as keenly as if they could actually hear. The psychological effects were very good,—"made the children alert and developed greater initiative."

It hardly needs to be said that these impressions have by no means the definiteness of those made upon the hearing ear. There is a sense of rhythm, of regularly recurring accents, particularly in music of a pronouncedly rhythmical style, and also a sense of varying nervous tension due to changes of pitch. It may also be taken for granted that persons of normal hearing are equally affected through their sensory nervous systems, though,

because that effect is submerged beneath the infinitely clearer and more powerful impressions made upon the auditory nerve, they are not conscious of it.

5. The Effect of Music Not Limited to Sensory Nerves

The effects of music on the nervous system are not confined to the sensory nerves. The vibrations affect the sympathetic and motor systems directly, not by way of the audition. Breathing, circulation, general stimulation or depression, are not affected by hearing or other sense perception, but immediately by the vibration of the nervous tissue itself. In other words, these effects of music are purely physical, not mental.

6. Difference in Musical Effect Depends on Physical Constitution

That the effect of music is physical is to be inferred from the fact that difference of susceptibility to it depends on type of physical constitution,—on the temperament, as we say. Phlegmatic, coarse-grained persons are rarely musical; when they are, there is, presumably, a susceptible nervous system overlaid by the coarse, fleshy tissue.[5]

Some persons are inversely susceptible. Dr. Johnson said that music was the least disagreeable of noises. Andrew Lang, the versatile author, admits that he dis-

[5] "A man of strong vitality, forceful personality, possessing plenty of energy, will enjoy music of equivalent qualities, that is, lively music of strong rhythmic character. For rhythm is accent, accent is will, will is expression of personal strength, or work, which is the expression of joy in living. If such a man lacks imagination, and he usually does, he will be fond of ragtime which is nothing but rhythm and accent."—Hans Schneider in *The Musical Quarterly,* April, 1921.

likes music extremely. He likes a song if the words are good and audible and is touched much as a dog is when he howls as he hears the sound of a piano. General Grant detested music in any and every form. To sit out an opera was an agony to him. Napoleon Bonaparte complained that music troubled his nerves. These are purely physical idiosyncrasies, not mental shortcomings.

7. Lack of Correspondence Between Musical Susceptibility and Mental Power

(*a*) *Musical and Intellectual Powers Do Not Correspond.* Musical gifts and intellectual talents are often in inverse proportion in musical persons. Blind Tom was a musical prodigy, but an imbecile, a filthy, gluttonous, black animal. He could reproduce at once simple music played in his hearing. He could learn the most difficult compositions of Beethoven, Mendelssohn and Liszt by continued coaching. He could turn his back to the piano and exchange the parts of the two hands. He was able to play "Yankee Doodle" with one hand and "The Fisher's Hornpipe" with the other and sing Root's "Tramp, Tramp, Tramp, the Boys are Marching," all at the same time. Yet he was an idiot!

(*b*) *Children and Animals Susceptible to Music.* Children, infants even, are usually very susceptible.[6] They

[6] With a mother's fond vanity the writer's wife once told a noted composer visiting in their home of the musical responsiveness of their latest baby; how he would lie supremely happy when the music was soft and sweet; how he would begin to wave his hands more and more vigorously as the music became more stirring; how when it became loud and crashing he would kick with his feet and wave his hands, squirming and crowing in a very abandon of delight. Naively and blissfully oblivious to the rather *malapropos* character of his reply, the visitor remarked, "I have noticed that my cats are affected in the same way!" Whatever his social tact, his philosophy certainly was correct.

not only love to make noise, but are attracted by actual music of a rhythmical kind. Many animals are susceptible to the sound of music. In infants and animals the lack of intellectual elements in the effect of music cannot be doubted.

(*c*) *Public Consensus Regarding Musicians.* From what has been said it seems to be clear that the effect of music is not directly intellectual in character. Its science is intellectual, of course, and the laws that govern its composition,—harmony, counterpoint, fugue, orchestration and the like,—call for no mean intellectual power. But the action of the music itself is not intellectual. As we have seen, the most intellectual minds are often unmusical. The general public consensus caricatures musicians as long-haired freaks. Goethe had no interest in his contemporary, Beethoven, and even less, if possible, in Schubert, who at that very time was conferring immortality upon some of Goethe's lyrics, such as "Der Erlkönig" and "Gretchen am Spinnrade."

8. The Apparent Emotionality of Music

Despite the lack of intellectual content in music, all literature is full of references to its emotionality. But how can there be genuine emotion without a previous idea of some kind to rouse it? If you meet a person on the street laughing, he will immediately take pleasure in telling you the idea that caused his laugh and you will laugh with him. If he cannot, you may be sure he is suffering from hysteria, a nervous disease. If you turn to your neighbour at the concert while Schumann's "Träumerei" is being played by the orchestra, or on the piano, and ask her why she looks so dreamy, she will reply, "Oh, it's the music!" She has no intellectual basis for her state of mind.

Emotions must have some definite fact, some definite desire or instinct, some definite mental action, as a basis, and that basis must have an emotional appeal. Now the intellectual material offered by music has no emotional appeal whatsoever. That the dominant seventh resolves into its tonic is not a fact that awakens feelings. You can stir no one with the rule that a sharp raises the pitch a half step and a flat lowers it the same interval.

We are therefore constrained to conclude that there is no inherent emotionality in the effect of music.

9. Apparently Emotional Effect of Music Differs With Different People

That the effect of music is only apparently emotional is further indicated by the fact that when you ask for some intellectual equivalent of the apparently emotional impression made by music, no two persons are likely to give you the same reply. If a musical composition is played, the impressions made will be as various as the individuals composing the audience. Helmholtz expresses this confusion well: "When different hearers endeavour to describe the impression of instrumental music, they often adduce entirely different situations or feelings which they suppose to have been symbolized by the music."[7]

Now, any emotional fact, incident, or experience produces exactly the same emotion (differing though it may be in intensity) in every person. What a startling thing it would be if the comedian's joke should set some of his hearers laughing, some of them weeping, some of

[7] Gurney also recognized this difficulty: "Music is perpetually felt as strongly emotional, while defying all attempts to analyze the experience, or to define it even in the most general way in terms of definite emotion."

them into melancholy meditation! But it is an inherent, essential characteristic of music that the same composition will produce apparently emotional effects as diverse as the persons hearing it. Offenbach's "Barcarolle" will bring to one man happy pictures of his far-away family and awake longings to return; to another memories of a happy day in sunny Capri; to another tender memories of a loving mother who had long since faded out of his life; to a mother will come a picture of her baby lying in innocent sleep in his crib. There is only the vaguest unity of feeling in this phantasmagoria of mental and emotional effects called up by Offenbach's music. This is absolutely out of harmony with all our other emotional experiences.

10. Music Often Merely Stimulating

Furthermore, the effect of music on some people is not even apparently emotional. It is simply stimulating. In some it sets the imagination at work, summoning up a series of unrelated pictures. In others, there is no special feeling, only a crowding throng of memories as diverse as human experience. Music stimulates philosophical thinkers, poets, orators, preachers,—nay even audiences, so that they hear with more interest and intelligence.

This stimulus on peculiarly susceptible natures is akin to the effect of such drugs as opium and Indian hemp. Berlioz, the French symphonic composer, describes the effects of music on him in the following terms: "While hearing certain pieces of music my vital forces seem at first to be doubled; I feel a delicious pleasure in which reason has no part; the habit of analysis itself then gives rise to admiration; the emotion, growing in the direct ratio of the energy and grandeur of the composer's ideas,

soon produces a strange agitation in the circulation of the blood; my arteries pulsate violently; tears, which usually announce the end of the paroxysm, often only indicate a progressive stage which is to become much more intense. In this case there follow spasmodic contractions of the muscles, trembling in all the limbs, a total numbness in the feet and hands, partial paralysis of the optic and auditory nerves."

Camille Mauclaire, the French author of "La Religion de l'Musique" gives a vivid description of the close of such a musical debauch. "But the end of a concert! All that I see resembles the charred remnants of a dazzling display of pyrotechnics, while my eyes are still dilated with its overpowering brilliancy. What a revulsion of feeling to fall again into the every-day life with its tedious conventions and formalities! The return to life from the ecstasy of opium has alone these indefinable terrors, these lingering descents from stupefaction towards consciousness."[8]

These are the experiences of men abnormally sensitive to the action of music. But every normal nervous system will give a similar reaction to music in kind if not in degree.

If the effect of music is neither intellectual nor emo-

[8] Note the reference to the effect of a drug! To emphasize the drugging effect of some music let us consider the following excerpts, from an interview in a Madison, Wisconsin, paper with Dr. Frank Morton, a nationally known musical scientist.

"Jazz—musical bolshevism—has the same disorganizing effect on the nerves as moonshine 'licker,'" declared Dr. Morton, "but good music has the power to stimulate, intoxicate or soothe the mind."

"The effect of rhythmic repetition is to drive its votaries to extreme of valour, or depravity, or rapture, that the strongest liquor would not inspire."

tional and does secure a pronouncedly physical reaction both in nervous sensations and in the functioning of the heart and other organs of the human body, was the philosopher Herbart in his discussion of art psychology right in confining the effect of music on the human organism to the physical, *i. e.*, nervous, side?

REVIEW QUESTIONS

1. Why is the psychology of music a difficult problem?
2. Illustrate obscure effects of music.
3. What is the physical basis for musical effect and how does it operate?
4. Through what nerves do the sounds affect the physical system?
5. State facts showing that auditory nerve is not the only means by which sound affects the mind.
6. Is the effect of music intelligible?
7. Give additional argument for the physical character of the effect of music.
8. Do musical susceptibility and mental power correspond?
9. What are the intellectual elements in music?
10. Is the alleged emotionality of music real or apparent?
11. What is the inevitable basis of emotion?
12. To what extent can music supply this basis?
13. Is music always emotional in character?
14. How did music affect two prominent French musicians physically?
15. Why does not music affect all persons equally?

VIII

THE PSYCHOLOGY OF MUSIC'S ACTION

Class Room Suggestions: This chapter can be made more clear and interesting if the musical illustrations are played on a piano or organ. As they are nearly all quite accessible, the playing need not be limited to the phrases here given, but can include whole passages. Indeed, other illustrative passages, not cited here, may be played, but care should be taken that they bear upon the individual points under discussion, or confusion will result.

Supplementary Reading: Bartholomew, "Psychology of Music"; Billroth, "Wer ist musikalisch?"; McCosh, "The Emotions."

It is not the hope of giving a full and complete solution to the problem stated in the foregoing chapter that prompts its further discussion. It is simply a sense of the necessity of supplying a working theory on which plans and methods in practical musical work may be based.

1. The Immediate Effect of Music

The immediate and primary effect of music is upon the sensory nervous system, and secondarily upon the sympathetic and motor nerves, the cerebellum, the spinal cord and the nervous ganglia or nerve centers. This action occurs through both the auditory nerve and the general sensory system, and directly through the vibration of the nervous tissue of the sympathetic and motor systems.

Gottschalk, the first great American piano virtuoso, recognized the truth of this proposition three quarters of a century ago: "Music is eminently sensuous. Certain combinations move us, not because they are ingenious, but because they move our nervous system in a certain way." Bartholomew in his "Psychology of

Music" in recognizing its truth, remarks: "Looking at the nervous system as a whole, we see here a mechanism admirably adapted for receiving and transmitting impulses from without to the soul and for giving expression to the conceptions, emotions, and volitions of the soul in the various muscular movements."[1]

Billroth, in his very suggestive little book, "Wer ist musikalisch?" carries the idea a step further. In the extreme stimulus of the sensory nervous system caused by music, the nerve centers associated with other senses, notably that of sight, are so moved upon that they also send a report to the brain. Out of this nervous fact noted by this German writer has grown the whole theory of the correspondence of tone and colour. Persons suffering from hyperæsthesia of the nerves have supposed themselves more gifted than their fellows in being able to see colours when they hear tones, not realizing that it is a morbid result of disease. Billroth says he heard a soprano singing sharp, and when she struck high "B" a quarter step too high, he suddenly felt a decayed tooth throb with pain.

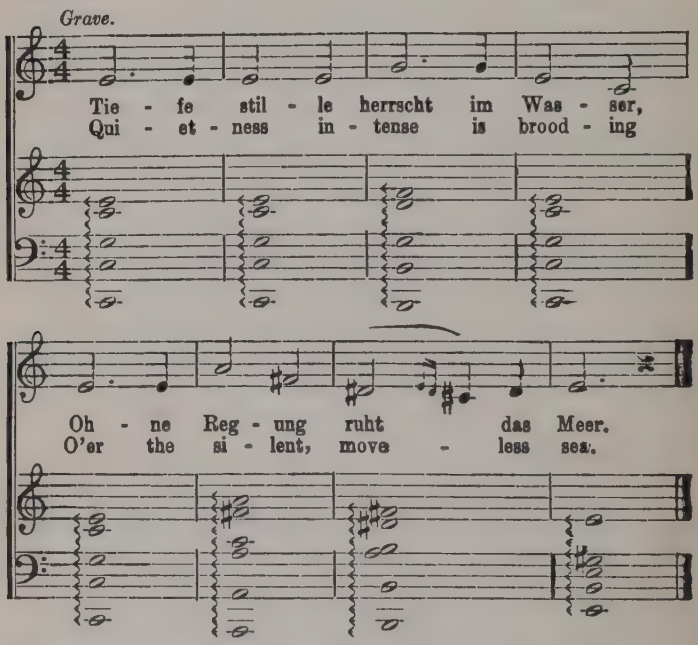
2. Music Affects the Nervous Tension[2]

The effect of music upon the nerves is either stimulating or depressing.[3]

[1] It is worth noting that that original American musical genius, William Billings, recognized the nervous reaction to music, for in his "Encomium on Music" in "The New England Psalm Singer," he refers to "the many wonderful effects which music has on the animal spirit and upon the nervous system."

[2] The phrase "nervous tension" expresses a universal experience, allusion to which is constant in both speech and the written word; but its exact character has not been scientifically determined any more than the method by which the nerves transmit sensations. Just as we know there is sensation, so we know the differing states of the nerves which we call depression or exhilaration. Science as yet can go no further than to report in tabulated form the reactions in heart action and respiration pro-

(*a*) *The Effect of Major Music.* Major music, unless modified by slow rhythm, or by excess of heavy discords, is essentially stimulating. Soft, quiet, major music may be so slightly depressing as to calm and soothe the nerves, as in the average lullaby, or in Schubert's "Meeres Stille."

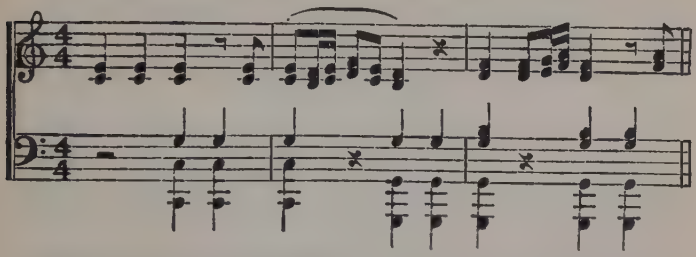


When very slow, but with strong accent and a melody

duced by the nervous changes we refer to as "changes in tension."

[3] An English scientist, in investigating the effect of music physiologically, found that while he could grip an object harder when strong, majestic music was played than when no music was played, his grip was correspondingly weaker than normal when a lullaby was played. This illustrates the stimulating effect of some music and the depressing influence of a different kind.

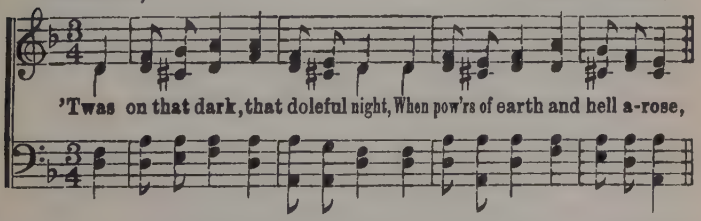
of slight range, it may be mournfully depressing, as in the "Dead March" in Handel's oratorio, "Saul."



Major music with marked and rapid rhythm exhilarates and stimulates, as may be felt in popular marches.[4] If the recurring accents—shocks to the nerves—are regular enough, the nervous stimulus overflows into the motor nervous system and the inclination is felt to march, or dance, or to mark time in some simpler way.

(*b*) *The Effect of Minor Music.* Minor music is essentially depressing to the nerves.

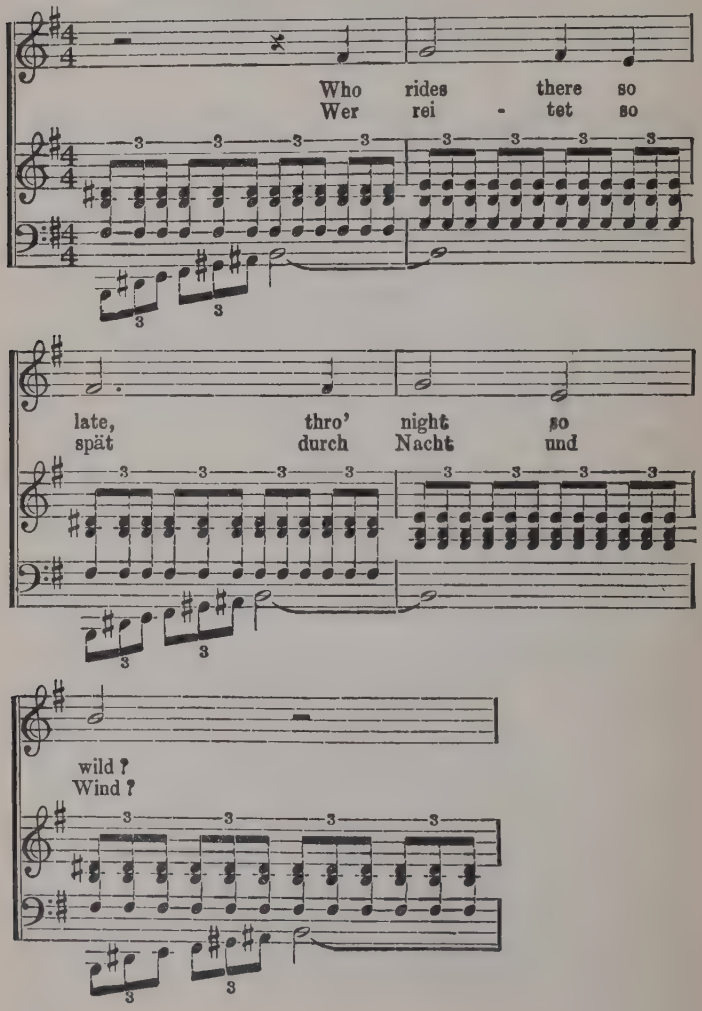
WINDHAM, L. M. DANIEL READ.



But this natural effect may be augumented or neutralized by rapidly and regularly recurring rhythm. The accom-

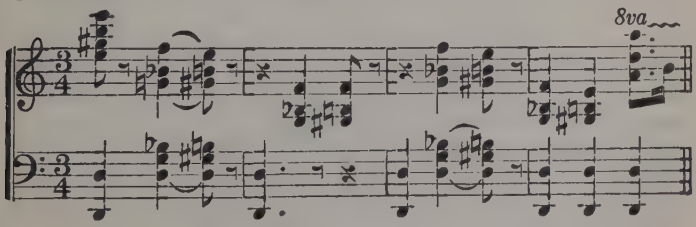
[4] "Man with that unfailing instinct for his feeling-states, unerringly and accurately connects with them the proper physical states. To him fast music is adequate with increase of action and an increase of joy; slow music is arrest of activity and ultimately, as we shall see later, will become the expression of sorrow."—Hans Schneider in *The Musical Quarterly* for April 1921.

paniment of Schubert's song, "Der Erlkönig," not only imitates the galloping steed, but creates the proper nervous background for the weird verse of Goethe.



The antagonistic tendencies of rhythm and minor tonality give the bizarre, brilliant effect such music often has.

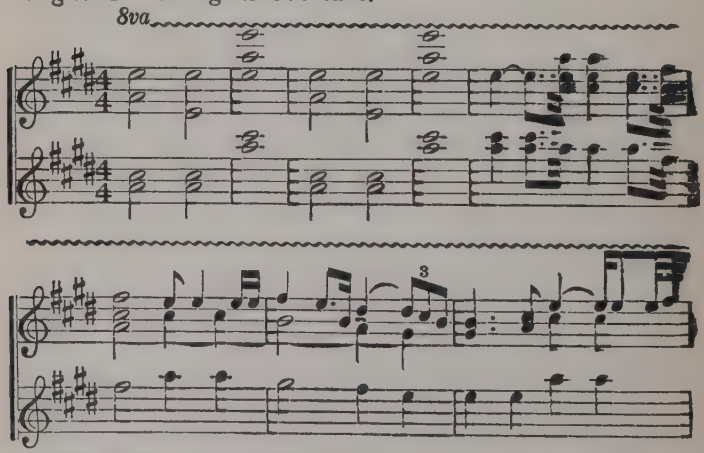
(*c*) *Effect of Music Modified by Rhythm and Discords.* The action of music on the nerves is modified by the elements of rhythm and discords, as already suggested, making it either pleasing or irritant (or exciting) in quality. An excess of discords produces great nervous irritation. Richard Strauss has built his style upon the exploitation of discords. A very cultivated Hungarian gentleman in Berlin explained to the writer why he never attended Strauss' operas: "He tears my nerves into pieces." Regularly recurring rhythm is pleasing to the natural nervous system, although to a sophisticated set of nerves the more obvious and simpler rhythms of a pronounced character may prove painful, the nervous shocks becoming cumulative by anticipation, and the nerves more susceptible by refinement. This is the philosophy of the nausea of nervously sensitive persons over banal rhythms that please the unrefined. Irregular rhythms full of unexpected shocks and harsh discords are irritant, adding intensity and poignancy to the effect whether stimulating or depressing,[5] as illustrated by a passage from Edward Elgar's oratorio, "The Dream of Gerontius."



[5] Gilpin, the negro actor, in his African play, "Emperor Jones" has a tam tam struck every second to give an aural background to the jungle life portrayed. The effect on white audiences of this simple device, ominous and depressing, was very profound, with its regular shock on the nerves, like a drop

(*d*) *The Effect of Pitch.* In addition to rhythm and discords, we have the element of pitch.[6] The nervous effect of varying pitch is felt, whether it is noted and analyzed by the mind or not. But the mental perception of the pitches of the several tones of a melody is the beginning of art music. There can be no musical thinking without it and musical thinking must precede musical creation. Then there is an association—whether conscious or subconscious matters not—of a nervous impression corresponding to each note and to the rhythm of successive notes. The unintended movements of a solo player or singer illustrate the latter.

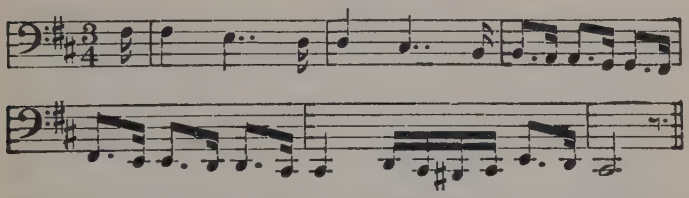
The notes corresponding to the middle octave of the range of the human voice, whether male or female, may be called normal or neutral. Notes above that range increase intensity and poignancy until the higher notes of the scale become fairly irritant, as in the opening of Wagner's Lohengrin overture.



of water every moment falling on one's head. It did more than all the scenery to put the audience into the jungle mood. It was, of course, only a nervous effect essentially.

[6] "I am aware I put forward nothing new in the assertion,

Below the normal octave the pitch becomes increasingly depressing, as witness the following bassoon passage from Tchaikovsky's "Pathetic" Symphony.



This increasing or decreasing of the vibrations per second affects the nerves in like proportion to the number of shocks.

(*e*) *The Effect of Force.* Intensity of impression also depends on the amount of force applied. Medium force is normal. Low force is depressing. Strong force is exhilarating in itself, but may be greatly modified by other factors, simply intensifying them.

(*f*) *The Effect of Quality of Tone.* The quality of tone whether that of a flute or a string, somber or brilliant, pure or metallic, negative as a simple tone or rich in overtones, has a great modifying power. One need but listen to the varied tonal qualities of the pipe organ stops and note the nervous effect produced upon one's own nerves to be impressed with the importance of the mere quality of the tone. Compare a Diapason with a Gamba, or a stopped Diapason with a Flute d'Amour, or a Vox Humana or Vox Angelica, with an Oboe (all reed stops) and you will get the modifying effect of the quality of tone.

(*g*) *The Effect of Music Infinitely Varied.* So many elements coöperate, in such endless variety of individual

that we easily connect an ascending or descending modulation with an increase or decrease of feeling. . . ."—Wallaschek, "Primitive Music."

intensity, in music's attack upon the nerves, that its range of nervous effect is infinitely varied. Add to this the differences in the nervous susceptibility of the hearers and you have a sweep of different effects that is practically infinite and certainly inexhaustible.

3. The Basis of Music's Mental Stimulation

Allusion has been made to the mental stimulation found in the action of music on the nerves. This is primarily due to its physical stimulus. The stimulated or depressed nerves hurry or slacken the action of the heart and soon affect the circulation and the breathing, and hence the whole physical system, as has been amply proved by tests made in the laboratory of Clark University, largely an institution of research.

In some true sense Northern Europe is Protestant today because of the stimulating effect of music. Gustavus Adolphus led his soldiers into battle against the combined armies of the Roman Catholic nations during the Thirty Years' War singing the great chorales born of the Reformation. Cromwell's "Ironsides" sang their crude metrical psalms with stentorian voices as they battled with the Roman Catholic cavaliers during and immediately after the reign of Charles the First. The victories of these generals was in no small degree due to the enthusiasm and vigour so generated. With armies singing the "Marseillaise" Napoleon conquered Europe. Never before has the stimulating value of music in war been so clearly and so formally recognized by military authorities as on both sides during the recent war.[7]

[7] One of the greatest psychological assets of the Central Powers was the song "Deutschland über Alles" with Haydn's noble melody. The allies lacked a great inspiring song that should unite their forces by a common sentiment.

4. Physical Reactions Not the Whole of Music's Effect

But when we have marked the differences of nervous tension produced by music, whether through the auditory nerve, through the great but dull ear of the whole sensory nervous system or directly through the other nervous systems, and when we have carefully observed and noted the influence upon the action of the heart by various classes of music and the consequent cerebral reactions growing out of its variations, have we sounded the depths of the mysteries of the appeal of music to the human soul? Is the difference of impression between "The Song of the Evening Star" from "Tannhäuser" and "The Wedding March" from "Lohengrin" all covered by the investigator's tabulation of heart beats?

Bartholomew earnestly protests: "The fact is, that the physiological element is not the whole of sound experience. There is something higher in musical sounds than mere sensuous delight. The pleasure of music is not all in the ear, any more than beauty is all in the eye. We can never explain Beethoven's Ninth Symphony by saying that it is nothing more than excitement of our nervous system by means of external sound waves." But if "the physiological element is not the whole of sound experience" what is there beyond? There must be something deeper in music than a mere appeal to the nervous system of the hearer. All the way along there has been a hint of feeling and emotion, but as elusive as the shining of heat lightning in the evening sky. Surely there must be a path somewhere through which we may discover the deeper spiritual truth of music.

Perhaps this apparent emotionality of music may furnish a clue worth following up. It seems wise to make

a hurried survey of man's emotional life; the solution of the problem may lie there.

5. The Emotions and the Nerves

Human emotions represent too large and complex a subject for full consideration here. We must be satisfied with a hurried study of the relations between them and the human nervous system. The following statements may be accepted as fairly accurate.

(*a*) The seat of the intellectual life is in the cerebrum or front lobe of the brain. The seat of the emotions is in the rest of the nervous system,—the cerebellum, or back lobe of the brain, the spinal cord and the smaller nerve centers of the sensory and sympathetic nervous systems. Excessive emotional strain will give pain in the back of the head, and in the back, and also abnormal nervous sensations throughout the body.

(*b*) Emotions have an extraordinary effect upon the nervous system, either stimulating or depressing.

(*c*) The agreeable emotions,—intellectual or social interest, hope, courage, love, altruistic sympathy, self-complaisance, gratified vanity or desire, and the like, stimulate the nervous system and through that the whole physical life. The quickened circulation shows in eyes, in flushed face, in the resonant voice, in the more vigorous bearing.

(*d*) The disagreeable emotions,—rage, fear, apprehension, disappointment, hate, suffering,—are all extremely depressing to the nerves, as may be seen from the pallor of the face or the trembling limbs. There may be stupor, apparent callousness, inability to weep, or they may cause loss of nervous control as in hysteria. Fainting and even death follow from this extreme depression.

(*e*) The marks of emotion in countenance and body, and the attitudes and actions expressing emotions, are not

so much primary expressions of feeling as secondary muscular results of the nervous effects.

(*f*) Emotions are intensified and their nervous effects are made more poignant by surrounding circumstances or by allowing the mind to dwell upon their causes, just as in music, rhythm, discord, force, and pitch intensify the effect of the music itself.

(*g*) There is a constant flow of emotion in the human mind and the corresponding tension of the nerves is ever fluctuating with the greater or less intensity of the feeling.

(*h*) The effects of emotion on the nerves, like the effects of music, are really only twofold, stimulating and depressing. The differences of intensity and extent of stimulation and depression are the only variations in either direction. A man weeps,—it may be from grief or from rage; you can hardly distinguish from his facial expression which emotion moves him. A man weeps,—it may be from joy or sympathy; again his facial expressions give no clue. But you can distinguish between the exhilaration of joy and the depression of rage in spite of the common term of tears.

(*i*) There is a great deal of complexity in emotions. One can take pleasure in being sad. It may be very pleasing in memory to call up some very unhappy experience. One may sadly deplore the death of a friend and yet rejoice over his release from intolerable pain. This complexity, as well as the difference in the character of emotions and their endless variety in intensity, just as in music, gives an inexhaustible number of phases of nervous tension.

(*j*) The nervous impression of an emotion in no way records the occasion of that emotion. Whether the nervous shock of fear is produced by a fall, an unex-

pected gunshot, or a clap on the shoulder, the effect is practically the same.

(*k*) It will be seen that there is a wide range in the ebb and flow of nervous tension. There is constant change, reflecting the activities of the intellect. The nerves seem to crave this unremitting variation, as well as the mind, as seen in the desire for pleasure, and in the distress and even nervous collapse caused by a dull, uneventful life. The effect of music on the nerves is one method of supplying this fundamental demand of the nervous system.

REVIEW QUESTIONS

1. What is the primary effect of music?
2. What does Bartholomew say about the nervous system?
3. How does music convey the idea of colour to the mind?
4. What is the general effect of major music on the nerves and how is it modified?
5. Minor music being fundamentally depressing, how can it be made to produce an opposite effect?
6. What is the modifying effect of rhythm?
7. What influence have discords?
8. How does varying pitch affect the nerves?
9. What effect has varying loudness or force?
10. What additional modifying factor is discovered?
11. What is the resultant of these many factors?
12. What is the basis of mental stimulation by music?
13. Illustrate this stimulating effect.
14. Is this physical effect the ultimate result of music?
15. Where lies the clue to a means of escape from this disappointing conclusion?
16. Where is the seat of the emotions?
17. What is the effect of the emotions on the nerves?
18. What emotions stimulate the nerves?
19. What emotions depress them?
20. How are the nervous effects of emotions modified?
21. What complexity is there in emotions?
22. Is nervous tension constant?

IX

NERVOUS CORRESPONDENCE BETWEEN MUSIC AND EMOTION

Class Room Suggestions: A chart can be placed on the blackboard visualizing the relation of music and emotion to their common term of nervous impression. Music—Nervous Impression—Emotion, developing the points of correspondence developed in Section I.

THE last two chapters have revealed a very striking correspondence between the nervous reactions to music and to emotion. It may not be amiss to review that correspondence and bring out its salient points.

I. CORRESPONDENCE BETWEEN MUSICAL AND EMOTIONAL NERVOUS IMPRESSIONS

(*a*) Major or exhilarating music corresponds to agreeable emotion.

(*b*) Minor or depressing music corresponds to disagreeable emotion.

(*c*) Both music and emotion are intensified by subordinate elements and concomitants.

(*d*) Both music and emotion produce an infinitely varied range of nervous impressions fluctuating in intensity from instant to instant.

(*e*) The nervous impressions of both music and emotion are indeterminate and vague.

(*f*) Minor and other depressing music may give pleasure, just as may the memories of disagreeable emotions.

(*g*) Music, therefore, produces the same general effect upon the nervous system that the emotions produce

through the mind. Emotions and their corresponding musical expression have a common term of nervous effect.

2. This Correspondence No Mere Coincidence

This correspondence is not an accident. It is the key to the relation of music and emotion. We are escaped from the materialistic sensuousness of Herbartism. Music makes a nervous impression much fainter than does emotion, but that impression suggests to the subconscious mind a similar previous nervous impression made by an emotion. The relation is immediately established and with the music comes the faint glow of an indeterminate vague emotion. The original emotion made its exposure in the nervous camera. The music develops and prints that exposure. The result is not the original scene, but a mere miniature of it. In a photograph or painting many a commonplace, even an ugly scene, has a beauty before unsuspected. Many an unhappy experience gets a glow of charm in the memory.

On investigation it will be found that many emotions have nervous effects so nearly the same that it is difficult to define the difference. This indeterminateness of the nervous impression produced by the emotion is shared by that made by music. Hence the correspondence between them is extremely general and not specific. It simply depends on the degree of stimulation or impression, of nervous pleasure or irritation.

A given composition will make a nervous impression approximately the same as a number of very different emotions and it will depend on the tendency, bias, or habit of the perceiving mind which of these emotions will be suggested. Here will be found the occasion of the indeterminateness and confusion of the induced or second-

ary emotion roused by music and of its varying suggestiveness to different individuals. A sudden discordant clash in orchestra, piano, or organ, will simply shock the nervous system, but will suggest to different people a murder, an explosion, a battle, a vague catastrophe, a fall, bad news, etc., as either of these would have produced the same general nervous impression.

3. Emotions Translated into Music

Emotions may be translated into music and music into emotion by means of their corresponding variations of nervous impressions. Exhilarating music and agreeable emotions produce a like impression; they have a common term in kind, although not in degree. The same is true of depressing music and disagreeable emotions, and so on through their several modifications. The emotion is due to a reaction from the mind's experience; the music comes from the fundamentally mechanical source without; but the nervous reactions may correspond very closely. The music does not create an emotion; it merely moves the nervous system as would an emotion, and the nervous reaction reaches the consciousness with a vague, misleading but contentless sense of emotion.

4. The Vagueness of Musical Feeling

It must always be remembered that music itself can only express the nervous impression made by an emotion, not the fact or thought that waked that emotion, and that that nervous impression is vague and indeterminate. The feelings roused by a high mountain, by the ocean, or by a thoughtful survey of the starry sky, affect the nerves so nearly alike that music cannot express the difference. A given symphony in elevated style might be called The

Himalayan, The Ocean, or The Niagara Symphony without any incongruity in either case.

The family of the boy Schumann did him a grave injustice when they laughed at the wild lugubriousness of his funeral march in memory of his dead canary bird. The actual effect of his grief over the death of his pet on the nerves of the boy was exactly the same as that which would be made on those of mature persons by grief over the loss of a near relative or friend. Music cannot distinguish between the death of a canary bird and that of a mother.

Here is the weakness of program music. In their effort to define the musically indefinable, modern composers have descended to mechanical tricks and mimetic passages that are not music. When it becomes baldly descriptive, it is no longer music, but more or less skillful mimicry or sleight of hand. When Beethoven introduced into his Pastoral Symphony the notes of the cuckoo, he explained to a friend that he did it as a joke. Richard Storrs Willis says regarding this phrase of the symphony, "Beethoven for the moment ceases to be Beethoven to be a cuckoo; but in cuckoo music, the cuckoo herself is certainly the better musician of the two."

Program music may succeed, provided that the theme chosen has a really emotional appeal to humanity at large and that that emotional appeal is in some way brought home to the hearer, and provided that the music in a spontaneous way reproduces the nervous impression of that emotion in all its fluctuations and variations. But when Wagner makes the orchestra sway to the flutterings of Isolde's scarf, he is out of the realm of music, striking though the effect may be.

The feelings engendered by music are vague because they have been mechanically produced from without,—as

by weather conditions or by a drug,—and have no mental content. The consciousness of a nervous impression rising in the minds gives a suggestion of emotionality but without any basis of thought, desire, impulse or experience, supplying no fixed, clear images or cognitions to the mind.

There may be subconscious memories of like nervous impressions, made by actual emotions and these, with the stimulus supplied by music to the imagination, yield only the stuff that dreams are made of. Given music does not yield a definite emotion in which all the hearers may share alike, but a ghostly shadow of an emotion into which the hearer will read his own experience.

A nocturne from Chopin is played. It is sad, depressing, melancholy, and yet gives pleasure. To a widow it will bring memories of her husband that give her sad comfort. To a lover it will suggest the charming qualities of his bride-to-be, from whom he is parted.

It is this glorifying power of memory or in the mingling of memory of happiness with subconscious recognition of present limitation or deprivation that the charm of depressing music is found. These mental ghosts that walk in memory's corridors are different in different people and hence the mental and emotional effects of music also differ.

5. Supplying an Intellectual Basis for Musical Nervous Impression

The very indeterminateness of the nervous impression made by music leads to two results. The mind demands a concrete reason for that impression and in memory or in imagination will seek to find it. This secondary, reminiscential emotion, a very faint reverberation of past emotional experience, seeks a definite intellectual basis.

This stimulates the mental action, alreadv quickened by the nervous effects of music, and develops responsiveness to outside suggestion.

Here is the great opportunity for the prefatory or contemporaneous comment, or for the text which accompanies the music. It is evident that when music is accompanied by a definite statement appealing to the thought, imagination, desire, or sensibility, creating an emotional nervous impression corresponding to it, the composite impression is much deeper than either alone would make.

There is a distinct difference between the nervous effect of music and of the spoken word. The former acts directly upon the nerves, the latter reaches the nerves through the mind by means of the idea conveyed by the word. Music impresses the nerves; the nerves demand of the mind the appropriate idea. The word on the other hand supplies an idea to the mind; the idea produces the reaction on the mind we call emotion and the emotion affects the nerves. The process is actually inverted.

The emotion is intensified by the music, and the music is made more expressive and pleasing by the emotion. It follows that wherever it is possible to make the emotional and the musical impression upon the nervous system practically to coincide, music may be used to strengthen the corresponding emotion on the subjective and to express it on the objective side.

6. Association of Ideas With Music

In this indefiniteness of nervous impression and the eagerness of the mind to find a positive intellectual basis for the induced feeling, lies the power of associated ideas. The memory will call up a definite idea which in any way has been clearly associated with a nervous excitation

much more easily and quickly than it will an emotion. Once get a definite relation established between the nervous effect produced by a given style of music and a given idea and the former will inevitably suggest the latter.

Once having accepted a mental image, or cognition, or experience, with a given piece of music, or even a class of music, the mental association of ideas is mysteriously strong! One man hears a popular Christian carol in triple time and only finds it pleasing and expressive of the Christmas joy. He does not dance, does not attend dances. The triple time in his mind is not associated with things frivolous. The man at his side has been more or less worldly-minded, danced, attended balls; to him the movement of the triple time carol brings up unworthy associations, and he is disgusted with the association of such music with a holy theme. A German comes to America and hears in an aristocratic church of high intellectual pretensions the common metre tune, "Rhine," and is fairly outraged by the incongruity of the church use of a tune he sang in his drinking bouts at a German university. It is all due to the peremptoriness of the law of the association of ideas.

Here we find the paradox of antagonistic impressions made by the same music. Every man brings to a given piece of music his own personal history through his nervous history. The Pope wants no women, but does want the Gregorian style. The Archbishop of Canterbury does not want Gregorian music, but the syllabic and stately anthems of Blow or Croft. The Broad church rector or the dignified pastor of a great city church wants the churchly canticles and the severest cathedral tunes of Dykes. The Low church curate or the suburban minister wants the more cheerful things of Barnby and Smart, as well as the best of the popular gospel songs. In this he

approaches the popular Methodist who wants a greater proportion of gospel and Sunday-school songs, and so on down to the Salvation Army. It is the inexorable law of the association of ideas with the nervous impressions produced by music.

7. Incongruities of Associated Ideas

It is a little startling sometimes to find an organist who eases his angry mind with more or less picturesque language tabooed in respectable society, and goes out semi-occasionally with "the boys" for "a night of it," denounce certain music as irreligious and profane—music that is actually in use among exceedingly pious and devout people.

The organist is sincere. He does not recognize the value of music in sheer physical exhilaration and inspiration in church service, nor its pedagogical value, nor its deepening of emotions proper to a service of other than exclusively worshipful feelings, much less the needed adaptation to the nerves of the given congregation. His only idea of religion is impressive, solemn ceremony. All else is to him unfitting.

It is the inescapable law of the association of certain ideas with certain nervous impressions made by certain kinds of music. The music he denounces, because of its cheap rhythms, is actually painful to him because the nervous impressions he accepts as religious and the irreligious nervous impressions associated with the rhythmical music are at war within him.

8. Prejudices Due to Improperly Associated Ideas

This law of association of ideas with music, or rather with its nervous impressions, has some strange results. An ambitious disciple of general and up-to-date culture

can jump from an ignorance of anything but the commonest street ditty to the apparently full appreciation of Richard Strauss' organized cacophonies, simply by reading in a newspaper that high authorities in music approve of them.

Prejudice favourable or unfavourable regarding authors, publishers, classes of music, etc., often not only seemingly, but really unreasonable, depends on this association of ideas with nervous impressions.

Without giving the cause, Gurney recognizes the fact: "Another common source of misconception is the very natural habit of judging music in connection with words and scenes to which it has been made an adjunct. . . . While we call certain tunes vulgar in the first instance, perhaps from their vulgar concomitants, and even after abstracting them from these, feel no inclination to recall the term, seeing how trivial and fleeting is any pleasure they are capable of giving, we may still perceive that they often give a certain pleasure to children and to adults of small musical development who show no inclination to vulgarity in other ways; . . . We have no grounds to consider them vulgarizing to the moral character, any more than a taste for bad puns, or for garlic." This difference of the effect of music upon people of high general culture and upon musically unsophisticated persons, lies quite largely in the established association of ideas.

9. Spontaneity in Music

Spontaneity in music is the close correspondence between the sequence of the nervous impressions in music and their natural sequence in emotion. When music is studied, made out of sheer knowledge and skill in intellectually handling musical materials, it may be technically interesting, but it is sure to violate the laws of the

sequence of emotions in their varying intensity. The nervous impressions are unnatural in their order, and hence give one uneasiness and even pain instead of pleasure. We call the music stiff, angular, artificial.

The composition that has "grip" on us is based on the composer's intuition of the natural sequence of variations of nervous tension due to his personal experience of the nervous impressions of emotion. Yet as one may learn to like certain foods, repulsive at first, or as a flagellant monk comes to take pleasure in the self-inflicted scourgings, so one may learn to appreciate technically fine music that has no normal spontaneous appeal—that really is artificial music.

REVIEW QUESTIONS

1. What lines of correspondence are there between the nervous effects of emotion and of music?
2. How does music suggest emotion?
3. Is this correspondence of nervous effect between music and emotion definite?
4. How is music translated into emotion and emotion into music?
5. What are the limitations of musical expression?
6. Is program music psychologically justified?
7. How does music stimulate the imagination?
8. What two results grow out of the indefiniteness of the nervous impression made by music?
9. What is the interaction between music and emotion?
10. Where lies the power of ideas associated with music?
11. What is the occasion of differences of judgment of a given piece of music?
12. To what are incongruous ideas and unreasonable prejudices due?
13. Why do some musical compositions seem spontaneous and appeal widely, while others appear stiff and artificial?

X

SOME COROLLARIES OF MUSICAL PSYCHOLOGY

Class Room Suggestions: This is an important chapter, as it sums up the practical applications of the foregoing study of the reaction of the human body and mind to the use of music. Unusual attention should be given to emphasizing the points made, some of which are contrary to generally accepted assumptions which are without any basis whatever.

If the outline of musical psychology developed in preceding chapters is accepted, certain corollaries follow inevitably.

1. Music Has No Inherent Moral Character

If music produces only a nervous impression of vague indefinite character, it must be essentially non-moral. It has no moral, religious, or even cultural value of its own. It simply intensifies what it finds associated with it in environment, associated exercises, or in text. In so far as it is out of harmony with these, it produces nervous and mental distress.

(*a*) *Used for Antagonistic Purposes.* It is used by managers of places of ill repute and by the preacher, each for his own purpose, as far apart as the antipodes.

(*b*) *No Moral Effect is Found in Musical People.* Shakespeare says that "music hath charms to soothe the savage breast," but history does not justify the remark. From Dionysius the Younger of Syracuse, through the debauched Ptolemies including Cleopatra, the last of the race, Nero the cruel fiddler and tenor soloist, the degenerate flute player, Heliogabolus, the music-loving but de-

praved Henry the Eighth of England, Charles the Ninth of France with a passion for the violin, known as consenting to the Massacre of St. Bartholomew's night, down to William the Second, Emperor of Germany, who wrote operas, and approved the unspeakable atrocities committed wherever his armies and those of his allies marched, the record of royal music lovers is foul with vice and cruelty.[1]

The decadent period of the Roman Empire, during the fourth and fifth centuries was notable for its public and private devotion to music. Marcellinus complains that science and philosophy have given place to music, and libraries are closed like funeral vaults. Chrysostom inveighs against the Christian Church as being better able to sing the frivolous and unclean songs then current than the psalms and songs of the church.

The recent autobiography of Richard Wagner in itself would refute the idea of the moral influence of music. No meaner, more ungrateful, cheaply vain, unreliable, untruthful, basely cringing spirit ever came into the limelight of publicity than the composer of "Tannhäuser" and "Parsifal." An examination of the inner life of other composers and musical artists might find no parallel to Wagner, but would disclose no support to the theory that music is morally uplifting.

The old German rhyme,

> "Wo man singt, da lass dich ruhig nieder,
> Boese Menschen haben keine Lieder,"[2]

has more geniality than truth. It will do as a rhetorical

[1] See "Music, Monarchs, and the Savage Breast" by Frederick H. Martens in *The Musical Quarterly,* April, 1921.

[2] Where people sing there fear no wrongs,
For evil spirits have no songs.

sentiment when referring to music, but hardly as a rule in the actual dealings with human nature.

(*c*) *Mere Music Cannot Replace Religious Exercises.* Men who wish to introduce the artistic conception of church music into our more ambitious churches in the form of elaborate quartets, solos, and organ music, and who often strive to displace Sunday evening services with miscellaneous programs of music and sacred concerts, often urge the moral influence of music.

The only cultivating influence music exerts is to refine and sensitize the nerves; but that may prepare the way for a more exquisite selfishness, for a more delicate sensuality, for a more dainty worldly-mindedness, as well as for a more noble life.

The truth of the matter is that music in itself is neither religious nor irreligious, neither moral nor immoral. By mental association certain styles of music may come to be recognized as religious, just as Wagner in his later operas so connected certain phrases with certain people, objects or places, as to call each to the memory of the hearer when its corresponding phrase appeared in the music.

Even then, aside from the mere mental suggestion, it may have no religious value. When rendered to give merely artistic pleasure, or as a means of musical culture, the most profoundly religious solos, cantatas, or oratorios, lose all religious value to the great majority of the hearers.

An organ recital may be very refining to the sensibilities and add to one's culture and capacity for enjoyment, but it has no moral or religious value, no matter how solemn or impressive its strains may be. A religious concert may be the reverse of religious in its influence, if the religious character of the texts used is ignored, or if they have no clearly religious value, and if the motive of the musicians

is personal display, whether of superior technical skill or of high musical culture, and if the hearer simply takes personal pleasure and delight in the music.

(*d*) *When Music Has Religious Value.* Music may have religious value (1) When the associations of time and place suggest religious thoughts and feelings; (2) when preceded or accompanied by comment of a religious nature; (3) when set to a text having religious ideas and expressing religious emotions and sung in a genuinely religious spirit; (4) when written in a style recognized by the singer, and especially by the hearer, as fitted for religious purposes, because of the previous association of the style with religious ideas or feelings. The religious element must be injected from without and must be very definite and greatly emphasized. Mere association cannot be depended upon to secure religious ends.

(*e*) *The Great Categories of the Mind.* The human mind in its legitimate and worthy efforts reaches out in five different directions: after truth in science, philosophy, and general scholarship; after practical utilities, personal and altruistic; after beauty in all its forms and phases; after things moral in life and conduct, particularly in the relation between man and man; and after things religious in the relation between man and the Great Supreme Being.

The absolutely symmetrical mind reaches out in all these directions with an energy proportionate to their several importance. But the average mind is not complete and symmetrical. Some men pursue knowledge and have little or no regard for its practical results, its artistic values, its moral influences, or its relation to God. Others esteem truth, beauty, moral influence, or religious feeling only as they produce practical results. Some men are

artists only, and have no immediate interest in science, in practical life, in morals, or in religion. In fact, the greater the tendency to emphasize the one category, and the larger the talent or genius a person possesses for that phase of human endeavour, the more certain will it be that the others will be ignored or even antagonized.

This explains why the intensely artistic and equally religious David could be guilty of immoralities that would shut him out of decent society in these days. It also solves the mystery why some severe moralists seem to have so little use for religion, and so many more have no appreciation of art. If Byron, whose defiant immoralities scandalized the world, wrote verses whose moral beauty is inspiring, or Liszt wrote solemn masses in spite of the fact that no attractive woman was safe under his influence, it is because these things are primarily and essentially beautiful, and only incidentally moral and religious. If, as in Byron's adventures of Don Juan, and Wagner's Tristan and Isolde, the immoral furnishes phases of beauty, these artists are just as free to give the full power of their genius to its expression. The beautiful is the all-important matter with the exclusively artistic soul. The moral and immoral is subordinate and of value only as it serves to strengthen the appeal to the sense of the beautiful.

(*f*) *Beauty and Religion Appeal to Different Functions of the Mind.* But this lack of harmony between devotion to the beautiful and devotion to the moral and religious is made more striking by the fact that they appeal to entirely different functions of the human mind. Beauty appeals to the selfish sensibilities. This is true even in its sympathetic and tender appeals. Morality and religion are essentially altruistic and are matters of will and character. There may be exquisite sensibility and little force

of character. There may even be intense appreciation of moral and spiritual beauty, and yet moral and religious character may be entirely wanting.

(*g*) *Music May be Demoralizing.* So far from music itself having a moral value, its exclusive pursuit is actually demoralizing! Its fundamental appeal is physical. It increases nervous susceptibility until it becomes irritability. Acting on the nerves in a way analogous to, if not corresponding with, the effects of stimulating and narcotic drugs like opium or Indian hemp, it occasionally produces neurotic effects similar in kind, if not in degree. If the reader will review the irritable musicians of his acquaintance, he will find more or less evident examples. Physicians occasionally forbid musical study to neuropathic children.

It emphasizes the sensibilities at the expense of the will. It makes musical enjoyment, the gratification of one's musical sensibilities, the chief object in life. It is therefore selfish in tendency and the mental attitude thus taken makes more powerful the appeal of other desires and passions.

2. Music as a Means to an End

Since music has varied effects upon the nervous system much as have the stimulants and narcotics used by physicians, then it may be used to secure definite ends of a varied character. Exhilarating music will give inspiration and mental stimulus. Depressing music will calm. Irritant music will excite.

Here is the place where music may be applied to its various public uses. In the public festival, the public funeral, the public amusement, the political campaign, in any movement calling for the stirring up of the feelings of the people, music may lose its ideal character of beauti-

ful expression of varied human feeling and passion and become an applied art.

It may attract attention and unify the scattered persons whom it is desired to influence; it may exhilarate their spirits and stimulate their minds; it may intensify feelings already existent, or produce a keener susceptibility to the means to be used to rouse them; it may even be used to replace undesirable emotions, such as rage or fear. A brass band playing cheerful music might prove a better queller of an excited, bloodthirsty mob than the water thrown by a company of firemen. An angry audience may be placated by a favourite piece of music. A panic-stricken crowd may be calmed by a stirring march. Good music assures the success of a parade, of a political gathering, of a public banquet, even of a largely attended restaurant. The immediate nervous effects in every case are vague and intangible, but none the less powerful and effective.

3. Music Must Be Adapted to the Nervous Systems to Be Affected

Just as a wise physician will adapt both the medicine and its strength to the vitality or susceptibility of his patients, so the manager of the music intended to serve a definite purpose must take into account the particular class of nervous systems from which a definite reaction is sought.

In the difference of temperament we find the varying individuality of composers and artists. There are national and racial characteristics of temperament that find expression in the composition or rendition of music.[3] Here

[3] "The natural music of a demonstrative people is rhythmic and lively; of a saturnine people, gloomy; of a melancholy and poetical people, pathetic; of a matter-of-fact people, simple,

is the basis of nationalism in music. It follows that music may be entirely successful in Germany for any specified purpose, yet may fail in accomplishing that purpose in Italy or the United States. The same principle obtains in regard to classes of people within a nation. The nervous tension of dwellers in New York City is likely to be much higher than that of the farmers of Lewis County of the same state. Adaptation of music to suit these differences is peremptory.

4. Three Essential Factors

The purpose in view becomes the commanding consideration to which the character, grade, quality of the music are subordinated. Here are three factors: (*a*) The purpose, (*b*) the people to be affected, and (*c*) the music to be used. The first two will condition the last. On the nervous organization of the people, their susceptibility, their sophistication or native simplicity, their coarseness or refinement, must depend the musical means to be employed to affect the nerves and through these their feelings. The music must impress their nerves agreeably, by adaptation to their stage of susceptibility, and to their sense of fitness. In some communities on some occasions a "jazz" band would be most effective, in another a brass band, in more refined circles an orchestra, or a string quartet—or even a solo.

It is not only a question of fitness in the ordinary conventional sense; it is a question of actual efficiency in

direct, and unelaborated; of a savage people, wild and fierce; of a lively people, merry and light; of an earnest people, dignified and noble. . . . The nature of man still governs his predilections, as is easily seen by the average differences of taste in art in such countries as Italy, France, and Germany."—C. Hubert H. Parry, "The Evolution of the Art of Music," p. 61.

securing a desired definite result. Even more than the instruments employed does the kind of music selected have an influence upon the nervous impressions sought. There are two factors here to be considered: The nervous susceptibility of the hearers, and the normal nervous reaction of the particular compositions used. To select heavy, lugubrious music for a merry social occasion simply to display a high degree of musical culture is no worse than to play a Bach fantasia as a postlude in the average church.

5. The Therapeutic Value of Music

One often reads in the public press articles on the curative value of music, and a sort of musical pharmacopœia has been suggested. From what has been said of the nervous reactions from music, it will be clear that there is a considerable basis of truth to the suggestion. Indeed, medicine men and witch doctors among savage tribes in all ages and all over the world have used it in their incantations over their patients. David was using music as a therapeutic agent when he played before Saul to drive out the evil spirit that vexed him.

Dr. McCosh in his work on "The Emotions" recognizes the therapeutic value of working on the emotions in some classes of disease; on exactly the same lines of treatment, and affecting the health of the body in exactly the same manner, musical therapy may be strongly urged. Strong emotions often induce visions and hallucinations in peculiarly susceptible people; persons of like nervous constitution with vivid imagination are sometimes similarly affected by brilliant or dreamy music.

In so far as music acts through the nervous system on the general health, it may be of service; this is peculiarly true in nervous diseases. In cases of excitement, calming

music will be indicated, in low vitality and depression exhilarating and stimulating compositions.

There are several difficulties: there can be no element of precision, there has been little investigation of the therapeutic value of different compositions, and different people react in diverse ways to the same music. Hence each patient presents an individual problem.

6. The Distress Caused by Music

The correspondence between the impression of music and of the emotions upon the nervous system explains why any incongruity between them is so unpleasant. To sing the noble Long Meter Doxology to a frivolous rhythmical melody,—or to a tender and plaintive tune,—makes two antagonistic nervous impressions and produces actual nervous distress. The pain a grief-stricken person feels in hearing cheerful music is actually physical, as well as mental.

This painful sense of nervous discord will affect persons in direct proportion to their nervous susceptibility to music. Individuals whose nervous sensitiveness has been developed by general culture, or by wide opportunities for hearing expressive music, will be more affected by such incongruities than coarse, untutored persons. In uncultured communities it is possible to sing the doxology to "Duane St." in a rapid rhythmical manner without a bad effect, partly because the people are not alive to the nervous dissonance produced, partly because that dissonance is submerged by the exhilaration caused by the rhythm and the general participation.[4]

[4] Gurney recognizes this fact when he says: "The love of coarse and violent sound is connected with the mere love of violent stimulation and manifests the exceptional way in which the stimulation of the auditory way overflows into the general nervous system."

Just as persons who have inherited keen moral sensibilities sometimes develop a sensitiveness of conscience that is painful to themselves and a serious restraint to their practical activities, as well as a bar to their association with average people in securing practical political or municipal reforms, so musical people occasionally develop such a nervous sensibility that they feel incongruities not apparent even to the cultivated people about them. In such cases susceptibility degenerates into mere irritability. Need it be said that there is nothing really admirable in such morbid sensitiveness, nothing trustworthy in its judgments?

There is frequently a sense of nervous dissonance among persons whose emotions or feelings have an improper intellectual basis. The person who associates exclusively elevated and dignified feelings with church work, and only light, frivolous ideas with rhythmical music will feel nervous dissonances in average church music due to improper coördination of nervous impressions.

7. The Intellectual Side of Music

Of course, there is an intellectual side to music as well, but only as the mind observes and analyzes the impressions made upon the nervous system. The material of music may be studied in a formal, abstract way. Musical compositions, like the mediæval polyphonic puzzles, or even some of Bach's fugues, may be written by sheer mental force, showing great ingenuity and extraordinary mechanical command of the technical resources of music, but they are mere puzzles, mere studies in organized noises, not music. While such compositions impress the nervous system, of course, those impressions do not coincide with any emotional impressions, and unless

stimulated by purely intellectual interest based on technical knowledge, the nerves are soon wearied and distressed.

It should be remembered that mere intellectual interest is confined to highly trained musicians and is not to be expected from even a congregation of high general culture. Organists are particularly prone to ignore the impracticability of complicated polyphonic organ compositions.

REVIEW QUESTIONS

1. Can moral character be ascribed to music? Why?
2. What historical proofs of the unmoral influence of music are cited?
3. Can musical concerts replace religious services with spiritual profit?
4. When has music spiritual value and when not?
5. Give the five great categories of human effort and their relation, and show how artistic beauty may be irreligious.
6. Explain the differing appeals of Beauty and Morality.
7. How may music become demoralizing?
8. When does music become a moral factor?
9. In what way may music become simply a means to an ulterior end?
10. In using music as a means to an end, what important factor must be taken into account?
11. What three phases of music as an applied art must be considered?
12. If music has an effect on the nervous system, how can it be used for curative purposes?
13. How may music cause distress instead of pleasure?
14. Why do many elaborate compositions weary instead of please?

XI

CHURCH MUSIC AS APPLIED ART

Class Room Suggestions: Another important chapter on whose full acceptance depends the success of the student's efficient use of music. The student should by all means be freed from the merely idealistic conception of church music on which so many ministers and musicians actually pride themselves. Make efficiency in securing spiritual results the sole criterion of church music.

1. Pure Art and Applied Art

Pure art exists for its own sake; it has no ulterior purpose beyond the expression of the beautiful. As soon as it is used as a means to an end, it is no longer pure art, but an applied art and an entirely new set of factors comes into play. The art of painting is pure when applied to a single picture expressing some beautiful conception of the artistic, or even to a series of pictures to decorate some noble room or building, for beauty is their supreme reason for existence. But paintings, either singly or in series used to enhance the sacred impression of a church or cathedral, lose their absolute artistic independence to a certain degree and become examples of applied art. This is even more true of pictorial art as applied to windows or tapestry. Architecture is essentially an applied art, though an occasional structure, such as a triumphal arch, or even a mausoleum, deserves recognition as pure art. While sculpture and carving may be looked upon as pure art, being used for the sake of the beauty they supply, without serving any definite purpose, yet limiting elements must be recognized in the practical ends sought in the structure or articles so beautified.

2. Music as Pure Art

Music is inherently pure art, being fundamentally sought and developed for the artistic satisfaction it affords. Symphonies, suites, instrumental quartets, instrumental numbers, operas, oratorios, arias, the greatest of musical compositions have no reason for existence, except their beauty. This is none the less true that the origin of music is found in an effort to assist worship by its use. From the very beginning it rooted deep in pure artistic impulse, even though the largest development occurred in its application first to religious and then to social purposes. The great composers all worshipped at the shrine of pure beauty. They failed when they tried to write to add attraction to special occasions, as for instances Beethoven's Mass and Wagner's Centennial March.[1]

3. Music as Applied Art

None the less, a large amount of music has been written for special purposes, of a varied sort. Dance music, marches, exhilarating music for public occasions, such as social and political meetings, entertainments—all are examples of music as an applied art,—that is, art with a purpose beyond the beautiful. That purpose, whatever it may be, becomes the controlling factor in the music used.

The fixed principles and abstract rules of pure art are not abrogated, but are subordinated and more or less obscured by the variable concrete elements the purpose introduces. This subordination prompts the leaders in every field of artistic effort,—literature, music, sculpture, painting,—to resent the introduction of such a purpose, whether purely social, commercial, pedagogical, moral, or religious.

[1] Beethoven's Mass failed as a mass, not as music. Wagner's Centennial March failed both as music and as a stimulating and exhilarating factor in the success of the Centennial Exhibition.

4. Music Applied to Religious Work

That artistic musicians should resent purely commercial purposes, or even the purpose of mere entertainment, is worthy of all approbation, as they are lower motives than the artistic; but as moral and religious purposes have an even nobler motive than the artistic, the constant effort to eliminate or ignore them cannot be justified. It is a false pride that prevents art from being the humble handmaid of morals and religion.

This is all the more true that religion has been the mother of art, giving the initial impulse. Modern music would not exist, but for the fostering care of the Christian Church. The religious purpose being the supreme purpose in human life, it follows that it has the supreme claim upon any agency that will be of assistance. While other forms of art are valuable in many ways, none of them are so available at all times, none can give such efficient service as music. In every age, in every land, among all peoples, it is the most efficient vehicle for religious truth, the most powerful spell to evoke religious feeling and sentiment.

5. The Final Purpose of Church Music Must Be Understood

If the religious purpose is the dominating element in church music, it follows that in its consideration there must be not only musical knowledge and skill and taste, but also a full comprehension and appreciation of the final end, full sympathy with it, and a clear insight into the artistic limitations thus introduced.

The musical critic or the well-trained musician may deserve to have his opinions quoted as authoritative in the realm of pure musical art and yet have no standing whatever as a critic or adviser in church music, if he has had

no religious experience, or does not recognize the supremacy of the religious purpose over art, or does not comprehend the adaptations and limitations imposed by the particular people to be helped or by the circumstances in which the work is to be done.

This limitation is usually overlooked both by the musicians themselves and by the church workers they advise, although it is just as true in other lines of applied art. The historian or critic of artistic architecture may be a very poor architect or a misleading adviser in practical building. Ruskin's ideas on wall-paper or on Christmas cards would probably have been anything but useful.

One often hears or sees the remark, in advocacy of the exclusive use of "churchly" high grade music in church work, that "one ought not to offer unto God anything less than the best." That is true, if interpreted rightly; but the "best" music is not necessarily that which conforms to some abstract artistic standard—and there are many of these standards.

The "best" church music is that which is most efficient, is that which is best adapted to the purpose sought and to the people to be affected, and so produces the best religious results. The judges here are not art critics, but practical church workers.

6. In Applied Art the Purpose is Preëminent

If certain spiritual results are to be secured by the use of music among a given people, it follows:

(*a*) That the kind of music used is not as important as securing the desired results.

(*b*) When definite religious and moral results are to be secured, personal idealistic tastes must be sacrificed in a cordial spirit of loyalty to the purpose in view.

7. Persons to Be Religiously Helped Must Be Considered

If the controlling factor in church music is edification and help, then the mental, moral, and religious condition of those to be edified and helped becomes an essential element in its development and application.

The grade and quality of music must be adapted to the grade of musical culture and nervous refinement of the people to be reached. It must please them or the message, or the appeal, is already shut out by prejudice. Adaptation is the first law of church music success.[2]

Moreover, the nervous difference is greatly increased by the difference in the ideas associated with music due to mental culture, moral ideals and the like. In the adaptation of music to applied uses of any kind this variable factor must be taken into account.

One of the most difficult phases of this adaptation is the realization that the work of the church includes "every creature," and that its music must reach and help not only the cultivated and artistic, but the rude and unlettered as well. This is all the more peremptory that the educated and refined classes have less need of emotional expression and have a wealth of other influences and resources that the masses lack.

There is an unconscious selfishness in many cultivated people who demand that all music must meet the requirements of their own natures. As Dr. Curwen remarks in

[2] "Music, though reigning supreme in the human heart, is subject to restrictions of time, place, and education. Unless all these conditions are favourable, the sympathy between the maker of the music and the recipient or hearer is lost. . . . When an ordinary person speaks of the beauty and power of music, he refers not to music in general, but to that of his own time, place, and level of education."—A. M. Richardson, Mus. Doc. in "Church Music."

his "Studies in Worship Music," regarding the music of the Salvation Army, "How hard it is for those whose natures have been refined by lifelong culture to enter into the feelings of an agricultural peasant or a cadger of one of our larger towns! Things which hinder our devotion may add to theirs; that which shocks us may attract them in the truest sense."[8]

This explains why Sir George Macfarren, the distinguished English conductor and composer, broadened his views as he grew older. Early in his career he held the traditional view that only the ancient diatonic style of harmony should be used in church music. In confessing his error he said: "I reflected not that men in church were the same human beings as the same men at home or at market or on the wayside. I failed to consider that folks thought in the same language, felt from like impulses, acted from similar emotions whether they were in one place or another, whether they interchanged ideas with their fellows or addressed themselves to the higher Being. I overlooked the profound truth that to be sincere one must be natural; and thus, whatever is assumed, if of form of speech or of melodious tones in which to declaim it, is unnatural—artificial, therefore, and consequently false!" Here is clearly expressed the reason for the adaptation of church music to the people it is intended to influence.

8. The Value of Adaptation

One of the difficulties with musical idealists is that they

[8] An English writer referring to this matter of adaptation puts the matter in a nutshell. "True science is elastic. It is half-science which is rigid and hidebound and unable to bend to circumstances. If we once have grip of the living principle, we can venture freely on its application to varying occasions!"

have no sense of the value of spontaneity and adaptation. Music is music to them, a merely abstract entity, whether in dealing with a cathedral congregation in an ancient clerical community or with the illiterate gamins of a great city. But if music is to have power to express or create feeling it must have regard to the character of the congregation whose feelings are to be expressed or evoked. If it is not spontaneous and natural to the people using it, it becomes forced, perfunctory, without responsiveness or power.

If people are rude and unlettered, it is folly to introduce heavy unrhythmical tunes, just as it would be folly to use light music of pronounced rhythms among highly cultivated worshippers; indeed, of the two there is less danger in the latter, for genuine music of a rhythmical character affects certain fundamental feelings of even the most cultivated persons in spite of their sophisticated judgment. Becoming all things to all men in order to save some, includes this adaptation to the musical need and capacity not only of the young, but of the less cultivated older people, and justifies this position.

9. Abstract Standards Not Applicable to Church Music

Furthermore if church music is applied, not ideal, art, and is shaped and moulded by extremely varied personal exigencies and resources, then it gives little opportunity for the rigid application of abstract standards of music. Under given circumstances, the worst thing to be done may be the use of the "best" music. The mechanical adoption of a fixed abstract standard of music, and the rather clamorous insistence upon its inflexible application everywhere and among all classes of people, have been a

fertile cause of religiously ineffective church music in this country and elsewhere.

The mechanical mind dearly loves a rule or a formula. Education, with its tendencies to abstraction and formulation, only hardens this mental trait into a habit. A person conscious of ignorance of the principles involved always is happiest when he has a definite precept to obey. But the rigid application of formulæ in the examination of musical compositions to be used in the church work, or of fixed rules to be obeyed in its rendition, prevents the pliability and adaptability demanded by the extraordinary variations of culture, ability and resources in our churches, if the real object of church music is to be attained.

10. Room for Divergent Opinions

It will be seen at a glance what room this two-sided nature of sacred music gives for difference of opinion and attitude. Vary the relative emphasis placed upon musical art and upon religious or moral purpose and the resultant views change in direct proportion. The professional musician employed by the church often practically ignores the religious ends that are sought, while the inartistic, unmusical minister is blind to the value of artistic considerations in his narrow eagerness for religious results. Between these extremes lies a great variety of conflicting ideas. Add the factor of blind devotion to tradition and historical precedent and you have the prevailing chaos and welter of views and opinions.

The necessity of a clear understanding of the relative importance of the ideal and the practical sides of the subject is manifest. Without entering into a further discussion of the relative weight of these two factors, let us assume in the development of our subject that the re-

ligious purpose is supreme, but that the artistic element yields its claim for consideration only when hard necessity marks its limits.

So far from these two elements being always antagonistic, church music is at its best when the susceptibility of the nervous systems is so great that they coöperate most intimately. Art gives beauty and attractiveness to religion and religion gives content and genuineness to the art. Lot and Abraham are not at variance; the contention arises between their servants.

11. Music Should Express All Religious Emotions

The range of feeling expressed by music is very wide, from a mere sense of physical well-being and vital force to the noblest joyous or despairing emotion. It may appeal in rhythm only to the motor nervous system, it may expressively accompany a mere statement of facts as in arithmetical or geographical songs, or mere narrative as in the English ballad, or it may swell into a very storm of passion as in the Venusberg scene in "Tannhäuser"; but it is still music and produces its nervous results.

If music expresses feeling then sacred music must express sacred feeling. Sacred feelings must have relation to one's apprehension of God and His divine attributes, to our praise and adoration of His infinite perfections, to our personal relations towards Him in love and obedience. When these sacred feelings are purely personal and individualistic, their expression has no place in the public congregation, where only emotions that are common to all should find a place. With this limitation all religious emotions may and should find conscious voice.

It should be emphasized that all religious emotions should find expression in church music. It is often

definitely asserted, or unconsciously assumed, that all music used in religious work must be solemn and stately and must be restricted to praise and prayer. That praise and prayer should constitute a large part of public worship should be emphasized again and again; but to shut out the musical expression of all other religious emotions were to deprive the church of a large part of its natural and divine heritage.[4] Many of these feelings are not sublime or majestic and solemn music does not fitly express them. Many of them actually demand music full of life and vigour, *i. e.*, rhythmical music.

(*a*) *Worshipful Emotion Quite Varied in Character.* The assumption that our religious music must always be characterized by solemn dignity begs the whole question. It proves that the objector to pronouncedly rhythmical forms has a limited idea of the range of religious feeling, recognizing only as a truly religious emotion the soul's awful sense of an omniscient, omnipresent, unsearchable Being, throned in the heavens. That is very noble as far as it goes, but a pantheist, a deist, a Mohammedan, nay, even an atheist with a solemn realization of all-prevailing, all-controlling natural law, can claim a share in this vague devotion.

But the Christian religion furnishes a wider range of emotion to be expressed. Its reverence is not an oppressive pall, but cheerful worship and rapturous adoration, glad thanksgiving and loyal consecration. Furthermore, when the amazing condescension of our God lifts us out of the realm of His material creation into companionship and even sonship, what would have been otherwise the impertinence of familiarity,—the love and devotion, the

[4] Dr. Richardson in "Church Music" is therefore unduly limiting the scope of musical help in church work when he asserts that "The raison d'être of church music is worship and worship only."

childlike trust, the loyal service, the fervent attitude,—in a word, the tender intimacy,—becomes a privilege and a right. These Godward emotions can and ought to be solemn and reverent and it would be very difficult to find any current music as it is actually sung,—not as it may be irreverently perverted—which approaches God in the flippant manner so frequently alleged.

(*b*) *Religious Emotions Growing Out of Human Relations.* But the devout soul has its relation to the moral world about it, to the kingdom of our Lord on earth, to its fellow saints, to the immortal souls, who have not yet won the immortal hope. Here is a wide scope of emotion that has an equal right to musical expression. Love for truth and righteousness, interest in the advancing kingdom of Christ, fellowship with the saints on earth, desire for the salvation of those outside the fold,—all inspire the sanctified heart to song not directed towards God, but towards the hearts and lives of fellow beings.

The impulse to help, to inspire, to persuade, to urge, finds instinctive expression in song and compels its purposeful use for practical and definite ends. The solemn dignity of a chorale does not serve this purpose, for these are not always exalted experiences. In so far as these impulses are joyous and stirring, rhythm is their natural expression. The march movement, which can be so effectively used to express alike exalted triumphal joy and the profoundest grief for the dead, is entirely in place in giving voice to some of these religious feelings, and even movements which have in them the grace and joyousness of triple time, but wanting its sensuousness, may occasionally have their place.

Most persons objecting to rhythmical music of this class do not understand in what spirit or *tempo* it is to be sung. If they do, they are guilty of dishonourably mis-

representing and caricaturing it to make their point. A young musician spoke on church music in a Sunday-school convention and took occasion to refer to the average gospel song as "rot"! To illustrate and enforce his point he played Sankey's most cheaply rhythmical song, "When the Mists have Rolled Away," excessively rapidly and accentuated the rhythm by a two-step accompaniment in his left hand, producing the merest caricature of the music. When the director of the music announced that same song at the conclusion of the address and had the people sing it as it was intended to be sung, no further reply to the young musician's attack was necessary.[5] If the young man had been attending Young People's meeting instead of playing light two-step music that made dotted eighths and sixteenths suggest frivolous music, he would not have misrepresented Sankey's song. It illustrates well the fact that if these rhythmical movements, as used in popular sacred music, have degrading associations, the perceiving mind has passed through the degrading place where they are found.

When a man has once learned the height and breadth of a complete and symmetrical religious experience, and has studied the needs of the world and the best methods of supplying them, no matter how intellectual he may be, or how refined and just his taste, he will accept the current rhythmical religious music in its best manifestations as having great value for spiritual and religious uses. He may seek to prevent the use of the grosser forms it

[5]An old Shropshire clerk, who played by ear only sacred music on his violin, was asked by some young ladies to play at a dance they were planning. "I canna do it," he said, "but I'll play 'The Ould Hunderth' quick, if that'll do." It could have been made to do; for most people distinguish between sacred and secular music chiefly by the *tempo* and rhythm.

occasionally takes, but will not discourage by narrow-minded criticism the faithful and successful workers who conscientiously, with great ability, and often with a great sacrifice of personal musical tastes, are seeking to promote the cause of Christ.

(*c*) *Church Music a Vehicle of Instruction.* But sacred music is not only the expression of religious feelings and a means of stimulating, reproducing and creating them, but also a vehicle for imparting instruction, admonition, or encouragement. "Onward, Christian Soldiers," "Scatter Sunshine," "Yield not to Temptation," are cases in point, and the use of agreeable and expressive rhythm in setting them to music is entirely congruous and befitting.

But most of these rhythmical sacred songs were originally written for children and young people, who respond instinctively to rhythmical measures. Even if the use of rhythm in sacred song had no theoretical basis justifying it, the practical need of adapting the music used to the capacity of these classes would be a sufficient reason for setting aside all these conventional and ultra-fastidious considerations.

12. Conclusions

The wise minister, with his eye on the tangible results found in the spiritual edification of believers or in the transformation of the life and character of unsaved persons by the power of the gospel, will study musical effects with a direct reference to the needs of his own particular congregation. He will not allow his artistic conscience to stifle his spiritual conscience, nor let the pride of art displace his sense of responsibility for souls. He will not ask, is this song up to the most recent Anglican standards, but will it move the people? He will not insist

that in every anthem every beat must be a separate chord, but judge whether it is calculated to please and then inspire, comfort, or even instruct, his congregation.

This does not mean that he shall have confused or vitiated artistic standards. Let him study and discriminate accurately as to the artistic value of the music he uses, but only be sure that in practical work those artistic conclusions take a subordinate place.

REVIEW QUESTIONS

1. State the difference between pure art and applied art.
2. When is music pure art?
3. What makes music an applied art?
4. Why have religious workers a right to use music as a means?
5. Why are professional musicians not always the best advisers regarding church music?
6. What is the "best" music?
7. What factor in church music is most important?
8. What other factor needs careful consideration?
9. Is church music only intended for cultivated persons in the congregation? If not, what follows?
10. Why is careful adaptation to the character of the congregation needful?
11. Are high artistic standards of supreme importance?
12. Why are inflexible rules fatal to efficiency?
13. Explain why such divergent opinions are current regarding church music?
14. Should all church music be exclusively worshipful?
15. Should worshipful music always be solemn and heavy?
16. What other emotions than those rising out of a consciousness of God should find expression?
17. What is the pedagogical value of church music?
18. What is the conclusion of the whole matter?

XII

HOW CHURCH MUSIC ASSISTS

After the analysis of the psychological factors in music found in preceding chapters, it will now be possible to explicate the specific ways in which music assists in church music.

1. Music Applied in Five Religious Lines

The ordinary applied uses of music are very simple compared with the complexity of religious purposes, for they call chiefly for stimulation.

The varied application of music to church work may be classified as follows:

(*a*) Expressing and inspiring an attitude of worship in all its varied phases and forms.

(*b*) Development of religious life by emotional appeal, enforcing and stimulating efforts made to deepen spiritual experience.

(*c*) Stimulating, inspiring, vitalizing exhortations and impulses for altruistic service.

(*d*) Rendering religious instruction attractive,—what may be called its pedagogical use.

(*e*) Affecting the feelings and wills of unregenerate persons,—its evangelistic use.

2. Music Useful in Every Phase of Church Work

(*a*) In the stated service it calms the nerves, preparing them for an attitude of worship, which should be the essential characteristic of such a service. By its majestic strains it prepares the way for noble thoughts and pro-

found emotions. It intensifies worshipful feelings and satisfies the mind by giving expression to them. The music for such a service should be dignified, noble, impressive, but with due regard for the nervous refinement and susceptibility, or lack of it, of the people engaged in the service.

(*b*) In semi-public devotional services, such as prayer-meetings, we have an entirely different situation from that of a stately public service. Elevation and majesty are not particularly called for. The tender emotions here find expression. The approach to God is individualistic, not collective. Simplicity and tenderness are to characterize the singing.

(*c*) In public services essentially devoted, not to worship, but to rousing active interest in some special church work, or in some line of general religious activity, stimulating, exhilarating music is wanted to stir up the physical enthusiasm, that is, excite nerves ready to respond to the inspiration of the addresses and appeals to be made in behalf of the announced topic.

(*d*) Then there is the didactic use of music. The simply exhilarating nervous effect of music is here brought into play to stimulate the perceptive faculties and the memory. Under practically the same head come hortative songs like the "Marseillaise" and "Stand up, Stand up for Jesus."

(*e*) As all the emotions are more or less directly associated with and subordinate to religion, there is place for music expressing these emotions in their religious relations. Under this head fall the quasi-sentimental songs which are often criticized when used in religious services. They have the same psychological justification as the preacher's appeal to these sentiments or emotions.

3. The Physical Effect of Religious Music

As has already been brought out at length, the first appeal of music is to the physical being. According to its character, it exhilarates and excites, or calms and depresses. This physical effect stimulates the mental action, increases the psychical responsiveness and creates what might be called physical interest. It is, therefore, not to be despised, but to be recognized as having fundamental value and as demanding earnest cultivation. To depreciate and scoff at it is to convict one's self of sheer ignorance of the workings of the human mind.

With some kind of gatherings, such as shop meetings, street meetings, missions and rural services, it is about all that at first can be done with music. But even this is well worth the doing preparatory to later results. In mission Sunday-schools, in popular revival campaigns, in great miscellaneous popular religious conventions and conferences, this merely physical and psychical effect will be indispensable.

The "Glory Song" and "Brighten the Corner" have probably succeeded, and have been valuable in thousands of great meetings, by virtue of their producing this nervous result, rather than by any direct spiritual influence they have exerted.

4. The Pleasure Produced by Religious Music

That music gives pleasure every one recognizes. The mere physical sensation is delightful. The symmetry and unity of the diverse elements of melody, harmony, and rhythm interest the intellectual faculties. The vague recalling of emotion felt in the indefinite past is still another element of pleasure.

This appeal to the fundamental desire for pleasure found in the human soul attracts many persons to the

service, whether it be made by the beating of a drum on the open streets by a squad of the Salvation Army, or by the playing of a skillful organist and the singing of an artistic quartet in a wealthy church. This is not a high office for sacred music to perform, but it is entirely legitimate, if it is merely incidental, and if the motive for securing an attendance is the proper one.

5. Music Predisposes the Mind to Accept Message

The pleasure in the hearing of the music has another valuable result; it predisposes the mind of the listener to consider favourably and to accept readily the truth and the general religious impressions the other exercises of the service are intended to convey. There is more hospitality of mind, more accessibility to the spiritual message.

Politicians and financial promoters fully understand and exploit the favourable effects of such an introduction to their efforts to convince and win. The combined musical and gustatory pleasures of a banquet precede the speeches and addresses that give the keynote to an impending campaign or explain the merits of a proposed financial venture.

6. Organizing Effect of Music

If there were no other justification of the organ prelude and the opening anthem, its influence as mere music in organizing the crowd of individuals into a psychical unity were enough. The mere fact that they are listening to the same music, are having a common experience, creates a composite personality that becomes an induction coil intensifying the current of feeling that is to flow to the individual listener.

The sooner this impression common to all is made and the deeper it is made, the more powerful is the common

and the individual responsiveness. The more powerful the opening impression,—unless it comes as a violent shock,—the more closely are the bonds of unity knit.

Instrumental music can do this. Vocal music is stronger, because it supplies the common emotional impression growing out of its text. Congregational singing is still more effective, because it adds the sympathy of coöperation and the physical stimulus to the nerves of deeper and more rapid breathing and of stronger heart action caused by singing.

This is an absolutely legitimate application of music, is psychologically justified as scientific, and of immense value in actual practical work. The opening music, therefore, is not the negligible matter it is usually considered to be. This is simply one of the many phases of "the psychology of the mob" which need to be carefully studied by the public worker.

7. The Process of Music's Emotional Preparation

Music may be used to set in motion and so make responsive the tract of the sensibilities in which lie the particular emotions the following address is intended to arouse. The mind is impressed with the nervous effect produced by the music and responds with a vague, contentless emotion that demands some definite tangible cause. If it is not furnished, the mind will go off into fancies and dreams and reminiscences, seeking for some object, thought, or experience justifying the nervous impressions and the induced emotion. If the mind in this eager search meets the appropriate mental impression in the succeeding exercise or address, the welcome is hearty and unreserved. There is eager attention and complete responsiveness of mind.

An aggressively rhythmical prelude prepares the way

for a stirring hymn of decision, the effect of both is heightened by an anthem full of life and vigour. By this time the nerves of the hearers have been exhilarated, his feelings of joy, courage, and aggressiveness have been vaguely aroused and are clamouring for the fitting discourse on moral reform, church work or missionary duty which will justify their activity. The recognition of the fitting cause of emotion so fills with thought and purpose what has been a mere indeterminate feeling, that it transforms it into an intelligent emotion having power over conscience and will. It remains for the speaker to fan the fire already burning in the soul, a vastly easier task than to start it.

8. Music as an Expression and Intensifier of Emotion

A strong, convincing sermon makes a deep impression upon the emotions of the hearer; those emotions in turn affect the nervous system. Both the nervous impression and the emotion urgently demand an articulate expression in some way. When opportunity is given by the playing of expressive music, by a solo, or an anthem by the choir, or better yet, by an appropriate hymn sung by the hearers themselves, the emotional result of the sermon is greatly increased and intensified.

Indeed, where the address has appealed chiefly to the intellect, and apparently has stirred the emotions but slightly, the use of proper music will often bring the latent emotion up into consciousness and increase it greatly. This emotionalizing of an abstract discourse, lacking in appeal to the feelings, is one of the most effective offices of music.

9. The Progress of Musical Effect in a Service

The manner in which music produces results prepara-

tory to the sermon, and its intensification of the sermon's effect, has been dwelt upon. But that is a rather narrow view of the service. Let us study the manner in which music affects what is to be an impressive and worshipful service.

Worship is the recognition of the infinite greatness and perfection of the Divine Being, an emotion of awe and reverence, a deliberate act of the will subordinating itself utterly to the divine will. In a mind given to abstract conceptions free from emotional realization, there is danger that so great an idea shall have no emotional response. Music may stimulate this flagging emotion and hence we open our service with a slow, massive prelude that shall calm and depress the nerves and so prepare the mind for the feeling of awe.

But this vague, oppressive sensation is not worship. Richard Storrs Willis clearly develops this thought: "A solemn feeling is not worship. Such a feeling is the result of architectural or artistic causes. A person, for instance, has entered a cathedral; he is awed by the grandeur and solemn hush of the place; he yields to an irresistible feeling of solemnity and afterwards goes away and feels, perhaps, as though he had worshipped. Not so. He has merely indulged in what might be called architectural awe. Such a feeling is a legitimate effect of elevated art. The place and the supreme object of worship lie higher than mere architecture, or music, or painting, artistically enjoyed, can bear the soul. For in the enjoyment of natural scenery, we are recipients; the mind, therefore, is in a passive state. Whereas, in worship, the mind is in an active state."

Dr. Dickinson of Oberlin in his very admirable book, "The History of Music in the Western Church," recognizes the unmoral and applied character of church music

and states it very clearly: "Music, even the noblest and purest, is not always or necessarily an aid to devotion, and there may even be snares in what seems at first a devoted ally. The analogy that exists between religious emotion and musical rapture is, after all, only an analogy; æsthetic delight, although it be the most refined, is not worship; the melting tenderness that often follows a sublime instrumental or choral strain is not contrition. Those who speak of all good music as religious do not understand the meaning of the terms they use. For devotion is not a mere vague feeling of longing or transport."

At the close of a majestic prelude, therefore, the congregation is not in a worshipful attitude; it is simply oppressed with a vague feeling analogous to awe. His emotions may be said to be running in neutral. Only in so far as the time and place suggest the idea of the Divine Being, may there be the beginnings of a genuine awe and reverence.

As the organist now plays over "Old Hundredth" as a prelude to the singing of the doxology, the words are remembered and the idea of God and of the homage due Him come in to give definite character to what has been an indefinite, passive sensation, and begins its transformation into genuine awe and reverence.

As the hearer joins with the rest in the praise and adoration, his will gives its assent to the exercise and at last he is actually worshipping. If the following invocation is sincerely devout and expresses fitly the hearer's feeling and purpose, it deepens the emotions already existing in the heart.

According to the varying personal equation, the hearer is now prepared for the hymn that follows. It may be the majestic verses of Watts:

"Before Jehovah's awful throne,
Ye nations, bow with sacred joy;
Know that the Lord is God alone,
He can create, and He destroy."

Here the feelings of majesty and awe, prepared for by the stately prelude, brought into consciousness by the doxology, deepened by the invocation, find stimulation in the noble character of the words of the hymn, in the elevation of the music, in the personal participation in the singing, and especially in the fact of their clear expression.

An appropriate psalm of praise read by the pastor, or read responsively, will further accentuate the devout feeling of the people and so prepare the way for the culmination of the worship in the pastor's prayer. The music has furnished only the nervous preparation and the physical emotion, if it may be so phrased, while the words of the doxology, the invocation, the hymn, the Scripture reading and the prayer supply the intellectual emotion.

The music has prepared the way for the other exercises and they in turn have intensified the effect of the music. It would be interesting, it even might be profitable, to attempt a series of studies in the nervous and emotional development of a service. The student is advised to work them out for himself on the basis of the resources he has at hand.

10. Substituting Related Emotioi

This vagueness of the nervous impression and its induced movement of the sensibilities can be made very useful in the substitution of related emotions. A man's love to his mother and to his Maker are very closely

related in character. The nervous impression is practically the same, although the latter may have (depending on the thoughtfulness of the subject) a greater degree of depression, due to the greater awe involved.

If we wish to develop love for the Divine Being in an unconverted person, we begin by appealing to his filial affection. Tender and soothing music may precede the calling up of childish reminiscences, or the touching anecdote. Or a solo, such as "My Mother's Prayer," or "Tell Mother I'll be There," in which music coöperates with the words in making a nervous and an emotional impression, will be still more effective.

The emotion and the nervous response to this fundamental social sensibility having been effective, it is not difficult to substitute in the hearer's mind the idea of God and His tender providence for the idea of the mother and her loving administry. It is practically the same emotion, the same nervous key; there is the utmost harmony between them, and the substituted idea is given the full benefit of the original appeal.

An evangelistic minister gives the following experience which is illustrative of this substitution of emotions: "I once sang in an evangelistic service Bliss' 'I Know Not What Awaits Me,' prefacing it with the story of the composer's tragic death at Ashtabula, and emphasizing the uncertainty of life. This was, of course, a slightly veiled but none the less effective appeal to the fundamental feeling of the fear of death. As I sang I noticed manifestations of deep feeling on the face of a young man whose wife had been earnestly praying for him without apparently any results, and who had just come home that day from the East, crossing the high bridge over the Ohio at Bellaire on a train. After his conversion, which occurred before the service closed, he told me, 'As

you sang I recalled my feelings as I crossed the bridge over the Ohio, and I thought, what if it had gone down with me as the Ashtabula bridge did with Bliss?' "

The song simply transferred the sympathy that had been roused in him for Bliss to himself. The fundamental personal and social feelings may thus be spiritualized in endlessly varied ways. This process is particularly effective in dealing with the unsaved, but is just as available in work among believers.

II. Conclusion

When once the fact is clearly recognized, that musical vibrations directly produce corresponding nervous vibrations and that they only induce vague contentless emotions in the mind, our thought is freed from a host of false and misleading ideas and we reach a firm basis for the application of music in church work. To confine its primary effect to purely physical and at best psychical limitations, may seem to degrade music, but such is not the case. The results of pleasure, of infinite expressiveness, of transcendent beauty still remain. The physical and psychical are degraded and degrading only when we have made them so. They are the helpful handmaids of the spirit, indispensable to our highest culture, happiness and character.

REVIEW QUESTIONS

1. What are the ends sought in church music?
2. In what lines is church music applied?
3. What is the value of music in the stated service?
4. Why use different music in devotional meetings?
5. Where should the inspirational value of music be sought?
6. Has church music any pedagogical value?
7. How are sentimental songs in religious work justified?
8. How does church music act in a service?

9. Has the physical effect of music any value in church work?

10. Should we seek to give pleasure by church music?

11. What attitude does the hearing of music produce in the hearer?

12. What is the organizing effect of music on an assembly?

13. What emotional preparation in the mind of the hearer results from music?

14. What effect has music on existing emotion?

15. What is the effect of a solemn prelude to a worshipful service?

16. Distinguish between awe produced by great music or great architecture and worshipful awe.

17. Describe the emotional progress in a service and analyze the contribution of music to it.

18. How may a purely human emotion be replaced by a religious one?

19. Where is such a substitution of emotions most useful?

20. In finding a physical basis for the effect of music have we degraded it or robbed it of any of its power?

III

THE HISTORY OF CHURCH MUSIC

XIII

THE ORIGIN OF MUSIC

Supplementary Reading: Parry, "The Evolution of the Art of Music," Appleton, N. Y.; Rowbotham, "History of Music"; Wallaschek, "Primitive Music"; Dickinson, "The Study of the History of Music," Scribner's Sons, N. Y.

1. Study of the Origin of Music Purely Speculative

When we seek to find the origin of music we plunge into the mists of speculation, for it lies back in the prehistoric period that yields us no data. We have no definite facts to guide us. It does us little or no good to have recourse to inferences from the evolutionary hypothesis, for the wish of its devotees to establish their theses breeds nothing but wild speculations which unfortunately often masquerade as established facts,

Two headlands alone rise above the fog,—the normal musical development of infants, and the musical efforts of savage tribes which may be looked upon as practical contemporaries of primitive man. From these we may lay down the course of our speculations and hope to reach approximate truth.

2. Music Innate

The impulse to utter cries and make noises expressive of feelings and in responsiveness to them is innate.[1]

[1] "The impulse to make a noise as an expression of feeling is universally admitted, and it may also be noted that it has a tendency to arouse sympathy in an auditor of any kind, and an excitement analogous to that felt by the maker of the noise."—C. Hubert H. Parry, "The Evolution of the Art of Music."

Man cries and sings as instinctively and spontaneously as a bird sings. The first cry of a new-born babe usually consists of two or more notes of varying pitch. As the child develops, it utters more and more varied tones, not only of distress but also of pleasure.

It also soon takes delight in hearing and making percussive noises, more or less rhythmical. These noises are not merely incidental, like the pecking of the sap sucker, but made for their own sake. Responsiveness to music is also manifest at once and rapidly developed, as seen in the effect not only of lullabies but also of other music. Many children learn to sing tunes at a very early age, occasionally even before they learn to talk. Having access to a piano or organ they pick out little phrases that are crudely melodic.

The very earliest historical hints regarding music, as found in Genesis 4:2 and 23, 24, indicate that in the sixth generation after Adam and apparently within his lifetime, stringed and wind instruments were in use and songs regarding important personal experiences were sung. The family of Lamech was evidently musical as well as inventive and artistic in handicraft. Whatever one's attitude towards these early records, whether historical or mythical, they assure the very early existence of the various forms of music.

(*a*) *The Theory of Darwin.* The suggestion of Darwin that music, both as melody and rhythm, was first acquired by the early progenitors of the race to enhance sex attractiveness is to take an incidental application for the source. Long before the sex impulse develops, the normal child has found methods of expressing in sounds a great complex of emotions. Indeed, instead of being the source of all musical development, the adolescent period, with its vague sex consciousness, supplies only

the latest large impulse to the use of sound as an expressive medium.

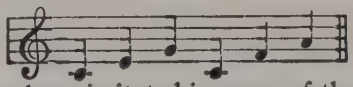
(*b*) *Spencer's Theory.* Herbert Spencer urges that music grows out of the natural cadences of human speech. But cadences of speech and music have no direct relation. While in singing the same organs are used as in speaking, the character of the sounds is entirely different. They have no organized variation. In so far as there are variations of pitch, they follow no established series of tones, or scale. Its tones of varied pitch have no relation to each other. Instead of the twelve semitones of the musical diatonic scale, it uses a hundred or more variations within the octave, and each human being has a selection of his own. There may be pleasing variation of pitch in a voice, but not melody in any proper sense.

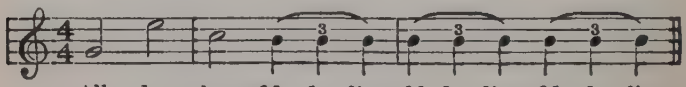
Moreover, there are instinctive cries and ululations among children not old enough to analyze the cadences of speech and to organize a series of tunes for singing.

(*c*) *Wallaschek's Theory.* Nor can we accept the theory of Richard Wallaschek that music is due to the "Spieltrieb," or instinct for play, growing out of the "surplus of energy," finding expression in rhythm. Infants, before they show any capacity for or recognition of rhythm, not only use tones of a variety of pitch, but are susceptible to them as in lullabies having a negligible element of rhythm.

Rhythm affects the nerves more than does melody, it is true, and hence is cultivated more by primitive man, but it by no means follows that rhythm precedes and that melody grows out of it, as Wallaschek argues. They are contemporaneous. The capacity and inner urge of both lies in the constitution of man.

(*d*) *The Bird Theory.* The theory formerly held that in music men imitate the songs of birds has few or no

advocates now. There is only one instance in the music of primitive men of any imitation of bird song. A wild duck of Kamchatka has a series of diatonic notes as follows:  which the natives are said to have imitated in some of their songs. Charming as the singing of some birds is, few of them have any definite melodic basis for their notes. The white-throated sparrow has a distinct call, albeit there are variants, on a diatonic basis,



but the more varied and fertile-noted song sparrow has no regard for any scale. Besides, the songs of birds at their best are merely more or less mechanical iterations of a few calls. These make none of the nervous impressions, and express and evoke none of the emotions we connect with music. The effect of the eerie notes of the hermit thrush are due to the mellowing effect of distance and the dusk of the evening time when he sings most freely and spontaneously. Heard near at hand, much of the charm of his notes is lost.

But why deny to man the original capacity for music this theory allows the birds?

It should not be overlooked that none of these theories accounts for the inherent impulse to make music by mechanical means, such as clapping of hands, beating of hollow logs or gourds.

3. The Raw Materials of Music

It must not be forgotten that the more or less rude outcries and other spontaneous vocal sounds and the instinc-

tively used mechanical methods of producing expressive sounds are merely the raw materials of music. They have a certain melodiousness, crude and unorganized as it may be, in its variations of pitch and rhythm, in its essential time relations of tones, albeit not fully organized.

While rhythm makes the strongest nervous impression, melody as based on variations of pitch is the very first element in musical development. Knowing nothing of a scale, yet the infant of a few days raises the pitch of its voice higher and higher as its distress or its desire for food increases, both to express its feelings and to impress its mother or other attendants. So much for the origin and development of the unconscious musical impulse.

4. The Birth of the Artistic Musical Impulse

But when these spontaneous shouts and cries and ululations, whether of mirth and joy, pain and distress, or other feelings, and the more or less instinctive efforts to make a rhythmical noise by rude mechanical methods expressive of the nervous reactions to primitive emotions, come up into clear consciousness and their effects are noted, analysis, study, and purpose combine to transform these raw materials into a conscious effort to produce them in an orderly, intelligent way, either to secure definite religious, social or military ends or to give artistic pleasure, however elementary.

It is out of this objectivizing of melodious and rhythmical sounds that music as we conceive of it is born. The sounds produced, whatever their nature, are no longer instinctive, but are planned, deliberate, purposeful. Man has risen into the region of musical art. Before it was nature working spontaneously, effective undoubtedly, beautiful possibly; now it becomes art,—it is actually music.

5. Rhythm Took the Prominent Place Originally

But when these sounds, made personally or by associates, or by mechanical means, rise objectively into consciousness, unaffected by tradition or convention, there can be little doubt that rhythm took the prominent place, because of its greater effect upon not only the sensory nerves, but upon the sympathetic and motor nerves as well. That is as true in the musical development of the individual as in that of the tribe or race and its greater or less predominance serves to mark the stage of development reached in both cases.

Moreover, melody acts upon the nerves in a more subtle and elusive way than rhythm and hence there must be a sensitivizing and refining of the nerves before its full value as a nervous reagent can be secured. Hence in a savage or even barbaric people melody will be very crude and without definite design, often little more than the natural cadences of speech under the influence of strong feeling, while persons of little refinement, even among a civilized people, will respond only to strongly marked rhythms and simple, emotional melodies. The practical application of these facts must not be overlooked.

6. The Development of Melody

The recognition of melodious sounds in nature could not but be immediate. The whistling and soughing of the wind in the trees, or its roaring in the storm, the cries of various wild animals, the attractive songs of the birds with their various melodies,—all the myriad sounds of nature with their changing pitch—all appealed to the melodic responsiveness inherent in the nerves of primitive man.

Then there was undoubtedly an almost immediate

observation of the variations and of the nature of the spontaneous cries and cadences of speech expressing various emotions and of the effects they produced upon the hearers, and this gave more material to the native impulse to create melody. In narratives the dramatic instinct seized upon these as enhancements of the effect, and the natural cadences were developed and exaggerated into a chanting rendition which finally developed into an improvised recitative song with a rude rhythmical accompaniment of stringed instruments or of drums of some kind.

There was no tune in the modern sense, no symmetrical form, no strophe and anti-strophe, no adaptation to underlying harmonic progression.[2] It was formless and continuous variation of pitch, rising and falling, not in a definite figure such as a cuckoo or white throated sparrow would use, but in an instinctive, unorganized, unstudied recording of the intensity of emotion.

It was easy to improvise, as there were no rules to consider; all that was necessary was to reproduce the definite emotion of the story or text and let spontaneous expression do the rest. It is doubtful whether at this early stage there were any definite, rememberable musical phrases. It must be kept in mind that there was no harmony; the accompaniment repeated the vocal notes in part or merely accentuated the rhythm suggested by the text.

Even after some phrases were definitely formulated, they were monotonously simple. This is evident from the music of savage and barbarous peoples of our own time.

[2] "Music indeed cannot exist till the definiteness of some kind of design is present in the succession of sounds. The impression produced by vague sounds is vague and soon passes away altogether."—C. Hubert H. Parry, "The Evolution of the Art of Music."

They chant rather than sing melodies. Their cadences, rather than tunes, are formless, more rhythmic than melodious. They are weird and have strange nervous reactions, because they follow no definite scale and vary in pitch without any possible harmonic basis. Aside from phonographic reproductions, any effort to report them and reduce them to our accepted notation is as futile as like efforts to reproduce the notes of the hermit thrush.

But gradually the relations of tone pitches were recognized and definite scales of a sort evolved. Even then the range of pitch was rather slight, and for a long time no complete series of tone pitches like our present scales were adopted, despite the advance of philosophy, literature, law, and other manifestations of civilization.

This was true in spite of the invention of stringed instruments with the varying pitches of their several longer and shorter strings, and despite the evolution of the pipe or flute from the hollow reed. The organizing of the various tone pitches into definite scales and their use in emotional reaction and expression awaited the needed refinement and subtilizing of a nervous system capable of apprehending and recording their effects.

7. The Development of Rhythm

The recognition of the relation of sounds in time, or rhythm, is inherent in the human nervous organization,—as much so as is the sense of colour or the appreciation of pleasing and disagreeable flavours. The nervous response to rhythm as heard in nature was immediate and spontaneous, as may be demonstrated by the differing reactions of most infants to unrhythmical and clearly rhythmical sounds. There is no need, therefore, of wild speculations regarding outward sources of rhythmic suggestion

and of the development of rhythmic responsiveness such as the throbbing of the temples or the regularity of respiration.

The expression of the rhythmical sense was very easy, as there were abundant easily recognized mechanical means of expressing it. The clapping of the hands, the striking together of stones, which presently evolved into the clangour of metallic cymbals, the pounding of a hollow tree with a stick developing into the drum in all its varied forms of hollow reverberating structure, were the progenitors of instruments of percussion.

The exciting attack of these instruments of percussion upon the nerves of primitive peoples, and the ease with which they were made and played, explain why rhythm has been the preponderant musical element and why this has been found true the world over and the ages through.

But instruments of percussion were not the only means of impressing the rhythmical sense. The rhythmic value of the twang of picked or struck strings was soon discovered and utilized to vary and emphasize the rhythmic attack on the nerves. This explains why in the absence of distinct melodies, the harp and the lyre were so extensively used in ancient times. Even more effective for this purpose were the trumpets and other loud wind instruments that evolved out of the dulcet reed, and hence the trumpet and ram's horn were so largely represented in the ancient orchestras.

8. The Development of the Dance

The observation of rhythms and their effects upon the motor nervous system was instinctive and immediate. Pronounced rhythms that inspired and controlled locomotion developed into marches. Other rhythms stimulated the spontaneous emotional action of other parts of the

body such as that of the feet, and the dance was born. This is found in every age, in every form and stage of civilization.

In thinking of the dance one must disassociate the sexual phase prevalent in our day, or we shall fail to comprehend its constant association with religious ceremonies. The dance is everywhere found in a rudimentary form in nature; it is coextensive with life. It is the joy of physical movement stimulated by rhythmic music. But its appeal, even in its most innocent forms, utterly apart from all sexual suggestion, is after all entirely physical, and hence, while not lacking in charm, has no high value or noble suggestion. Used in the early ages by all religions, including the Hebrew and the Christian;[3] as a means of adding intensity to religious ceremonies, it has fallen into disuse for this purpose in direct proportion to the increase of refinement, until in our own time it has descended to a cheap social diversion deprecated or antagonized by persons of high and sensitive moral character, more particularly because of its sexual suggestiveness.

9. The Development of Musical Instruments

Aside from the use and development of the human voice, the world's noblest and most expressive musical instrument, the primitive man discovered and invented

[3] The writer remembers seeing, as a small boy, in the midst of a regular religious service of considerable emotional interest, women rise in their places and engage in a quiet revolving dance through the aisles for a few minutes and then return to their seats. Those participating in this movement were devout elderly women of retiring disposition and there could be no basis for a suspicion of self-conscious vanity or desire of conspicuousness. Even then it was a survival from previous generations of a method of expression of religious emotion.

all of the three types of musical instruments now in use.[4]

(*a*) Percussive instruments, such as the drum, the tambourine, and the cymbal.

(*b*) Wind instruments, such as the pipe, the bugle, and the trumpet.

(*c*) Stringed instruments, such as the harp, the lyre, and the psaltery.

Later instruments, including the modern, are mere developments and elaborations of the foregoing, the chief lines of improvement being the perfect control of tone pitches, and their organization into scales, and the variation and enrichment of tone colour.

10. Music Originally Purely an Applied Art

"When music, heavenly Muse, was young" she was simply a handmaiden, a servant assisting other agencies in furthering religious, social, military, and other like interests. Music, both vocal and instrumental, was used by medicine men and priests to deepen and intensify the effect of their incantations or their religious rites and ceremonies.

It was used in connection with poetic recitations and dances to give dignity to great political and social occasions. In public and private banquets it was performed as an exhilarating agency and as a diversion. The Greeks looked upon it as an educational help and even as a moral stimulant.

[4] How early the impulse to invent musical instruments was felt may be judged from the fact that in a cavern at Gourdan (Haute Garonne) there was found, with other implements of the Stone Age, a bone pierced with holes at the side, undoubtedly a rude flute. As another indication we may refer to the flute found in an Egyptian tomb of the Bronze Age (3000 B. C.) and to the great harp recently found in the tomb of Tut-aukh-ammon.

Music had no independent existence as an art. It was simply a stimulating, exciting agency. Its influence was felt, but the method of its action utterly uncomprehended; hence it was looked upon as mysterious and even supernatural.

II. The Development of Religious Ritual

Savages are everywhere found to be intensely religious. Their sanctions of law and custom as well as religious rites and ceremonies have a religious basis. The religious instinct is always gregarious, expressing itself in sacrifice, liturgy, and festival, in an assembly of some kind, either public or exclusive. Just as the train-crier, the ragman, and other persons appealing to a multitude of people fall into formal cadences, so the officiating priest acquired certain measured tones of speech which were more and more definitely marked until they became a chant.

It was a short and evident step to reinforce these rhythmical cadences with instruments and so enhance their hypnotic power over the hearers. This emphasis of the rhythm led to bodily movements and gestures. Here we have the three essential elements of a religious ritual in all ages, in all climes: the intoning voice or voices, the instrumental accompaniment (with the voice, or without it as an intensifier) and the ritualistic genuflexions or dance. Religion has developed music for its own devout or spectacular uses and the idea that it might develop into an independent art never crossed the minds of men until these later centuries.

REVIEW QUESTIONS

1. What basis have we for speculation regarding the origin of music?
2. What is the primary origin of music?

3. How early do we find references to songs and instruments?

4. State Darwin's theory of the origin of music and the objections thereto.

5. What is Spencer's theory? Give the reply.

6. Why is Wallaschek's theory unacceptable?

7. What is the bird theory and the objections thereto?

8. What is the relation of natural cries and primitive mechanical sounds to music?

9. When and how does the artistic impulse manifest itself?

10. What element in music was preëminent at first? and why?

11. If variations of pitch are first produced in human and other cries, why does melody take a subordinate place in primitive musical development?

12. How did the development of melody proceed?

13. What is the origin of rhythm in music? How was it developed?

14. What was the relation of music to the primitive dance?

15. What three classes of instruments were early invented?

16. What was the motive for the early development of music?

17. Give music's relation to development of religious ritual.

XIV

PRE-CHRISTIAN MUSIC

Supplementary Reading: Dickinson, "The Study of the History of Music," and "Music in the Western Church," Scribner's Sons, New York; Baltzell, "History of Music," Presser, Philadelphia; Engel, "The Music of the Most Ancient Nations," Reeves, London; Stainer, "The Music of the Bible," Novello, London; Naumann, "The History of Music," Cassell, London; Grove, "Dictionary of Music and Musicians," Art. "Greek Music," Presser, Philadelphia; Parry, "The Evolution of the Art of Music," Appleton, New York; Williams, "The Story of Notation," Scribner's Sons, New York; Rowbotham, "History of Music," Bentley, London.

In making a hurried survey of the development of music, we must content ourselves with the barest outlines, trusting that the reader will seek the more interesting details in the supplementary reading we have ventured to suggest.

1. The Lines of Development

(*a*) *Logical Development.* The logical development has followed in a general way the following course: Rhythm, Harmony, and Form.

(*b*) *Development of Appeal.* There has been a striking development in the appeal that music makes to human beings.

(1) *The Nervous Appeal.* The early music and the music of savages and barbarous people of the present day make their appeal almost wholly to the physical nature, *i. e.*, the nervous system. This we shall find true until 1000 A. D. The music of the Christian Church through its first millennium was not exciting, but calming and depressing, admirably adapted to the sole purpose of laying

a physical basis for reverence and awe in public service. None the less, it was a physical appeal.

(2) *The Intellectual Appeal.* Beginning with the second millennium, musicians turned to the intellectual elements of music and produced music based wholly on rules and methods and devices in polyphonal compositions. There was still a great deal of physical appeal in actual church life, but the progressive impulse was intellectual only.

(3) *The Emotional Appeal.* In the fifteenth century we find traces of a desire to make music a means of emotional expression and that tendency, building upon the intellectual materials acquired more or less mechanically in the previous centuries, led to a rapid widening of the musical horizon and to the application of music to the expression not only of the fundamental emotions of men, but also of the most subtle and elusive feelings, and of their fierce and unbridled passions. We are still engaged in finding new methods and forms for both the normal and abnormal emotional states of our age.

2. Music Among the Egyptians, Assyrians and Greeks

What has been said of primitive music in general applies to the music of these early nations. We have few definite data, beyond vague allusions and the reliefs on surviving monuments, or paintings and carvings in tombs and temples; but we have enough to assure us that the music of the Egyptians, Assyrians, Greeks, and Hebrews of which we have the slightest record was already far superior to that of most of the savage tribes and barbarous peoples of the present age. In these cases there is no hope of connecting up with the origin of music.

(*a*) *Music Among the Egyptians.*

(1) *Prevalence of Musical Culture.* In ancient Egypt music was a sacred art controlled by the priests who already at the beginning of history suffered no innovations or changes in their sacred hymns or melodies.[1] They understood the relation of tone pitches to length and tautness of strings and had systems of keys and notation. The paintings and carvings in their tombs and temples that have come down to us show that they had a large variety of instruments, percussion, strings, and wind, from the small tinkling sistrum to the great thirteen-stringed harp larger than our own. The harp was the nucleus of the Egyptian orchestra. Out of a full orchestra of fifty pieces twenty were harps. As chromatics were impossible on these instruments, their scale must have been diatonic, as we found the ancient Egyptian flute (3000 B. C.) to be. The compass of the whole orchestra was four and a half octaves.

(2) *Public Use of Music.* Music was a never absent part of all Egyptian public and private festivities, processions, religious rites and ceremonies, and formal funerals. They had a rich treasury of lyrical poems and sacred hymns sung at public or temple ceremonies.

(3) *The Lack of Harmony.* With their knowledge of pitch relations and the methods of varying them and their great range of instrumental effects, one would infer that they had discovered the harmony existing between concordant tones; but despite the pictures of players using

[1] "Plato tells us that amongst these sacred songs some must have been of great antiquity, as he believed that good music and beautiful works of art had existed amongst them for ten thousand years without suffering any change. 'In their possession,' adds the Greek philosopher, 'are songs having the power to exalt and ennoble mankind, and these could only emanate from gods or godlike men.'"—Naumann, "The History of Music."

FIG. 1. Great Egyptian Harp.

FIG. 2. Tambourine and Harp.

FIG. 3. A harp on a stand, a man beating time, and a player on the tambourа.

FIG. 4. Performance on the double pipe, with a rhythmical accompaniment.

FIG. 5. Egyptian Sistrum.

EGYPTIAN MUSICAL INSTRUMENTS

both hands, there is no evidence, either from their own writings or from the reports of Greek writers on the subject, that they had discovered or exploited the harmonic relations between tones. They may have played in octaves or even fifths, unconsciously anticipating the mixture stops of the modern organ, in order to strengthen their simple melodies, just as one hears, even in this day, voices of unusual range in unison singing among unmusical people, sing the melody in those tone relations.[2] It is also possible that there was a crude harmony known to the priests who kept it in esoteric secrecy as they evidently did many other methods of producing illusions and apparently supernatural effects.

(*b*) *Music Among the Assyrians.* As in all other early civilizations, music among the Assyrians was intimately associated with liturgies and ceremonial rites and controlled by the priests as a sacred art. Their most ancient monuments have tracings of representations of instruments and players. Their earliest surviving literature contains hymns to the gods. Among the tablets dug up on the site of Nineveh was a service addressed to Assyrian gods, composed of hymns, prayers, and penitential psalms intended for public worship, as expressly stated, and comparable to the missal of the Roman Catholic Church. There was a large variety of instruments used in their temples. Kings and other high lords maintained orchestras at their courts.

In general, the Assyrians used the same types of in-

[2] The Orientals had little capacity for harmony. Their whole range of musical responsiveness was melodic. On the other hand, some of the savage tribes of Africa, Bushmen and Hottentots, seem to have it in large measure, singing a second part to a new European tune quite spontaneously. They also play instruments in quartets.

struments as the Egyptians, probably handed down from a common ancestry. There is no reason to believe that their music differed essentially from that of the Egyptians in its crudeness of melody, emphasis of rhythm, dependence on mere noise for its coarser effects, and lack of harmony, although Engel insists that their music was softer, stringed instruments being chiefly used, while loud rhythmical instruments were but sparingly employed; the Egyptians used various kinds of instruments of percussion and the Hebrews loud trumpets and other noisy rhythmical instruments, although their only instrument of percussion was the toph or tambourine, referred to in the Old Testament as the timbrel and the tabret. It was associated with poetic recitations and with dances, as elsewhere.

(*c*) *Music Among the Greeks.* There are vastly more data for the study of music among the Greeks than for the other early civilizations, as many of their treatises on the subject have survived, besides full incidental discussions in general literature. This is all the more fortunate since our modern music may be said to be the great-grandchild of Greek music through the early and the later Christian Church.

(1) *The Greeks Musically Progressive.* Music among the Greeks was much more mobile and progressive than among the early nations already considered, as it was not controlled exclusively by the priests and subject to their petrifying conservatism after reaching a practical stage of development; nor was its study and theory esoteric in its nature. It was made the subject of philosophical and æsthetic as well as mathematical investigation and consideration, and hence developed from the primitive religious beginning parallel with that of other nations into a somewhat independent idealistic art, although more

FIG. 6. Assyrian Harp. (Nebel.)

FIG. 7. The Assyrian Cymbals.

FIG. 8. Assyrian Double Flute.

Fig. 9. Assyrian Lyre. (Kinnor.)

FIG. 10. Assyrian Small Harp. (Kinnor.)

ASSYRIAN MUSICAL INSTRUMENTS

philosophical than actually musical. No less a philosopher than Pythagoras laid the foundations of mathematical acoustics and established the Greek scales on a scientific basis.[3]

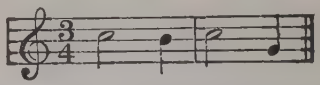
(2) *Nature of Greek Music.* During the greater part of the history of the Grecian peoples, music consisted of recitative with more or less instrumental accompaniment of a purely rhythmical character, without harmony, and accompanied by dances and other action stimulated by the rhythm. As in other nations it was merely a means to an end,—the stirring and stimulating of the nervous system with a view of creating enthusiasm in the course of social, political, military and religious movements and ceremonies.

(3) *Greek Conception of Music and Its Place.* Music was regarded with extreme reverence and held to have a supernatural origin. Apollo often appears in their plastic art with a lyre in token of his musical primacy. Dependent upon its mode, moral or immoral influence upon human character was ascribed to it.[4] Various trades and social organizations had appropriate songs of their own. Song contests were numerous and the victors were held in high honour, quite as much as the victors in the great athletic contests. Athens still takes pride in an ancient monument commemorating the musical victory of one of its ancient citizens.

[3] For the investigations of Pythagoras see Pole, "The Philosophy of Music," p. 92.

[4] Plato and Aristoxenus in the ancient Athenian days represented the conservative, traditional musical element, while Aristotle justifies the innovations made by Phrynis and Timotheus in his day. The former coterie emphasized the moral and educational value of what they esteemed to be good music, while the latter denied its moral value entirely.

The Grecian melody was very smooth.[5] The notes were equal in length, except where one was twice the length of the next, *i. e.*,

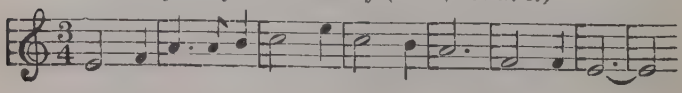


(4) *The Lack of Harmony.* As elsewhere, melody was subordinate to rhythm which bound music, poetry, and action together in the drama. While their instrumental resources were large, including double flutes and double trumpets, no trace can be found of the use of harmony. It seems strange that with so many instruments of varied character and range the concordant sounding of two or more tones at the same time should not have accidentally occurred and its effects observed. It may be accounted for by the excessive sharpness of their third and seventh which made what are our fundamental triads somewhat discordant. Their melodies have no harmonic basis such as have ours.

Perhaps most important of all, their *mese* or dominant tone, the most prominent in their melodies, had no evident harmonic relation to the other notes of their scale. Had harmony been discovered, it seems reasonable to believe that we should find it discussed in the writings of the Grecian musical theorists which have come down to us.

(5) *The Influence of Egypt.* There is little doubt that the impulse to the development of both notation and scale came from Egypt just as did the initiative in the pictorial and plastic arts. Pythagoras is said to have studied music in Egypt among the priests and may have

[5] Very Early Greek Melody (Circa, 700 B. C.)



had the benefit of their esoteric science on the subject of music. But, as in the other arts, the scholar soon outstripped the teacher. The ossifying influence of priestly conservatism, disallowing innovation and change, stopped musical progress in Egypt.

(6) *The Greek Scale.* The Greek scale was the outgrowth of the Dorian tetrachord based on the four strings of the lyre; not a chord of four simultaneously sounding notes of different pitch, but a series of four tones the lowest and highest a perfect fourth apart and therefore fixed in their relation, while the two inner tones might be varied in their intervals: E F G A might be the resultant series. On this tetrachord another could be superimposed, A B C D, or sub-imposed, B C D E, thus extending the scale in both directions. From this tetrachord the several modes were developed. These were the scales varying in the order of their intervals.

In the modern major scale the intervals are all whole steps, except those between the third and fourth and seventh and eighth tones which are half steps. In the modern melodic minor scale the half steps are between the second and third and seventh and eighth tones. This is true, no matter on which tone we begin,—C, or D, or any one of the other notes of the scale. If we begin on C, it is the key of C; if on G, it is the key of G, etc. But in every key the location of the whole and half step intervals in the scale is the same.

This is not true of the Greek modes, and hence it is misleading to speak of them as "keys." The Greeks had no black keys on their pianos, so to speak, *i. e.*, had no chromatic notes or accidentals.[6] Hence, if the scale

[6] That statement needs a slight qualification. Theoretically they had chromatic and enharmonic scales, the latter containing quarter steps not recognized by us. Even in their diatonic scale they used B♭ and C♯ in some modes.

began on D, as in the Phrygian mode, the half steps occurred between the second and third and the sixth and seventh notes of the scale. The Dorian mode began on E and hence the half steps occurred between the first and second and fifth and sixth tones. The mode beginning on F, the Lydian, had the half steps between the third (A) and fourth (B♭) and the seventh and eighth notes of the scale, being the same as our major scale. The Hypophrygian mode began on G and its half steps were found between the third and fourth and the sixth and seventh tones. To a modern musician it seems strange that they did not see the possibilities of the Lydian mode on which modern music is largely based. Had their thirds of C and G (E and B) been more concordant (like our own), harmony would likely have been evolved and the whole course of the development of Greek and Early Christian music would have been changed. These were the more commonly used modes, but there were a number of others, including a chromatic and an enharmonic scale.

Our ears would not have been pleased with their music in any mode, for it lacked all the essential elements of modern music.[7] There was no tonality in the Greek system, no keynote, no relation between the starting note

[7] "The Greeks, moreover, were much nearer the beginning of musical things, and may be naturally expected to have been more under the spell of the individual sympathetic magnetism of the performer than even uneducated modern people; and the accounts we have of their system tend to confirm these views. Its limitations are such as do not encourage a belief in high artistic development, for at no time did the scheme extend much beyond what could be reproduced upon the white keys of the pianoforte and an occasional B♭ and C♯ and all the notes used were comprised within the limits of the low A in the bass staff and the E at the top of the treble staff."—C. Hubert H. Parry, "The Evolution of the Art of Music."

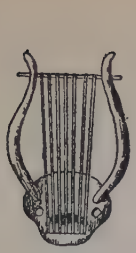


FIG. 11.

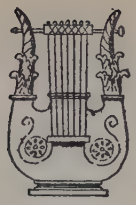


FIG. 12.

Greek Lyres.

FIG. 13.
Greek Cythara.

FIG. 14. Greek
Cythara and Plectron.

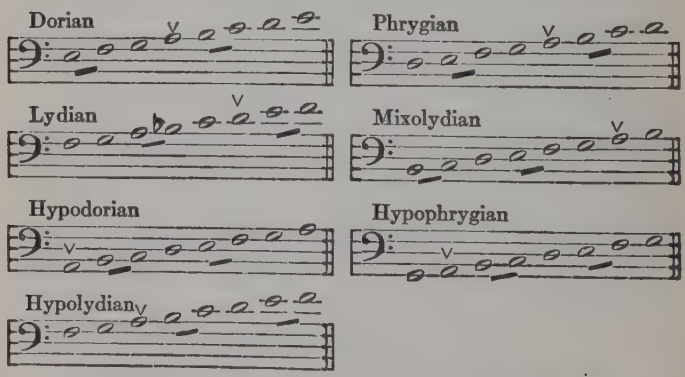
FIG. 15. Ulysses Passing the Sirens.
(*From a Relief on a Marble Sarcophagus in the Museum at Florence.*)
Showing the Pipes of Pan, the Lyre and Double Flute.

GRECIAN MUSICAL INSTRUMENTS

and the other notes of the tetrachord or scale. A melody could begin or end on any note without any sense of discomfort to the hearer. There was no idea of harmony. The music was melodic and melodic only.

It may make these Greek scales based on their modes clearer, if we give them in our modern notation. The half steps are marked — . The important note or *mese* in each scale is marked with a V. Remembering that most of the notes of a melody occurred on this dominant degree, we shall understand the difference of pitch in the scale and why the representative of the modern scale, the Lydian, with its high *mese* of upper D, suggesting strain and passion, was looked upon as unworthy and even lascivious,[8] while the Dorian with its comfortable *mese*, A, was approved.

As most of the singing was done by men, we place those scales on the bass staff. It will be understood that the whole scale included the treble staff as well.



To distinguish the three octaves of this scale they had modified names. In the fourth century A. D. the following list is given by Alypios:

[8] Plato even proposed to prohibit its use.

Low	*Medium*	*High*
Hypo-Dorian	Dorian	Hyper-Ionian
Hypo-Ionian	Ionian	Hyper-Dorian
Hypo-Phrygian	Phrygian	Hyper-Phrygian
Hypo-Æolian	Æolian	Hyper-Æolian
Hypo-Lydian	Lydian	Hyper-Lydian

The effects of these varied modes were quite different —as much so as those of our major and minor scales. The Dorian mode was held to express courage and aggressiveness, the Phrygian was more genial and exciting and expressed pleasure; the Lydian was said to be effeminate and voluptuous.

It must always be remembered that these scales had no harmonic basis. The effort to harmonize some of them would give us strange effects, forced and fantastic in the progression of the chords and weird and painful to the ordinary modern ear.

These modes are of commanding interest to us because on some of them was based the music of the Christian Church for many a century. In the Greek scale as finally developed we find our diatonic scale. It agrees with the white keys of our organ, because our organ keys have been copied from the Greek organ keys which were naturally an outgrowth of their scale. Modern music differs from the ancient in having, in addition to an accepted scale, tonality, rhythm, measure and harmony.

REVIEW QUESTIONS

1. What are the logical lines of musical development?
2. On the basis of appeal of human susceptibility, what has been the source of the development of music?
3. Under whose control was Egyptian music, and what was the result?
4. What was the chief use of music in ancient Egypt?

5. What evidence have we that harmony was known among the Egyptians?

6. What was the place of music among the ancient Assyrians?

7. What was the character of this music?

8. As compared with the Egyptians, what was the Greek attitude towards music?

9. Who was the father of mathematical acoustics?

10. What were the chief characteristics of the Greek music?

11. What were the Greek ideas of the place and value of music?

12. What was the usual range of Greek melodies?

13. Why was the Greek music melodic and not harmonic in character?

14. What was the part played by Egypt in Greek music?

15. On what were the Greek scales based?

16. How were the scales extended beyond the original tetrachord?

17. How did the Greek scales differ from our own?

18. Which of their scales approached our own and what was the important difference?

19. What was the location of the half step in the several Greek scales?

20. What was the effect of the *mese* or dominant note in a Greek scale?

21. Why was the Lydian scale considered immoral and lascivious?

XV

PRE-CHRISTIAN MUSIC, CONTINUED

Class Room Suggestions: Assign to several members the task of collating and citing the Scripture passages referring to the various instruments used by the Hebrews and to the musical organization of the tabernacle and the temple at different periods.

3. Music Among the Hebrews

(*a*) *Patriarchal Music.* While we hear nothing of the use of music in the time of the patriarchs from Noah to Jacob, there can be little doubt of its use in a more or less private way, for Laban chided Jacob for leaving secretly and depriving him of the privilege of sending him away "with mirth and with songs, with tabret and with harp" (Gen. 31:27). As the families were small and the religious ceremonies very simple and improvised, it is not surprising that it had not a large place.[1]

(*b*) *The Post-Egyptian Era.* But when Israel became a nation and developed a system of worship, music immediately appeared. Moses and the children of Israel singing the great triumphant ode after the destruction of the Egyptian army, followed by the women with an antiphonal chorus and dances led by Miriam, indicates previous organization and training. Such elaborate mass singing and symbolic movements cannot be improvised. When Moses came down from the mount, he found the

[1] "But it must not be expected that, as an art, music could reach a very high standard amongst nomadic tribes, whose roof was never more substantial than a tent, whose temple of worship was the canopy of heaven."—Stainer, "Music of the Bible."

FIG. 16. The Hebrew Harp. (Kinnor.)

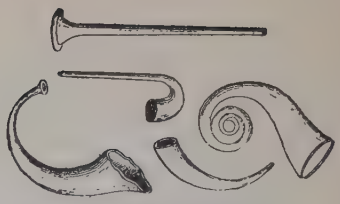


FIG. 17. The Small Hebrew Trumpets. (Keren.)

FIG. 18. Round Hebrew Drums or Tambourines. (Toph.)

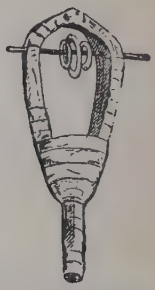


FIG. 19. The Hebrew Sistrum. (Manghaughim.)

FIG. 20. Hebrew Drums of Varied Forms. (Toph.)

HEBREW MUSICAL INSTRUMENTS

people singing and dancing before the golden calf, as they likely had done before the image of Apis in the religious ceremonies of the Egyptians. The Chaldean instruments probably inherited from their forefathers had been largely increased in number by adopting those of Egyptians. Their vocal music doubtless was enriched from the same source during their thirteen generations of captivity in Egypt.

After the distribution of the Israelites, following the conquest of Canaan, there seemed to be less opportunity for the use and development of music. Only isolated reports occur, such as the song of Deborah and Barak and the dancing of the daughter of Jephtha and her companions. Yet that they occur at all shows that music was privately cultivated to some extent through the period of the Judges. A secular occasion for music and dancing was the triumph accorded David and Saul after the slaying of Goliath and the defeat of the Philistines.

(*c*) *The Davidic Era.* With David began a new era in the history of Hebrew music. Not only was he a great soloist with harp and voice, and the writer of a great number of psalms that became the nucleus of the national Psalter, but he reorganized the musical service of the tabernacle most elaborately with leaders of song and directors of the several chapels of the great orchestra of divers instruments,—stringed instruments, trumpets, flutes, cymbals,—all of varied design and power and tone colour.[2] However, it must be remembered that to do this

[2] That David must have had a royal band of singers in his court seems to be clearly indicated by the words of Barzillai when he refused David's invitation to dwell in his court. Among other reasons he gave, he said, "Can I hear any more the voice of singing men and singing women?" Solomon seems to have enlarged the musical facilities of the court, for in Ecclesiastes 2:8

there must have been trained singers and players, and varied instruments already in existence. This "ordinance of David, King of Israel" became the model for all future generations, like the Decree of Pope Gregory in later ages.

Solomon elaborated the musical ritual and made music a very prominent factor in the dedication of his temple. Indeed the immediate preface to the manifestation of the divine presence was the great climacteric outburst of the full choir and orchestra.

In the reign of Hezekiah, after a long period of religious declension and neglect of the temple service, there was a restoration of the splendour of the temple music. After the Captivity, when Nehemiah and Ezra rebuilt the city and the temple, there was another thorough and complete musical reorganization "after the ordinance of David, King of Israel." But from that time on, even after the Herodian rebuilding of the temple, we hear little of the use of music. Undoubtedly it existed, but not as a notable element of the service.

(*d*) *The Musical Instruments of the Hebrews.* The musical instruments used by the Hebrews were borrowed from the Assyrians and the Egyptians in so far as they were not a heritage from the patriarchal age. No trace can be found of any new inventions on their part. The *kinnor* (harp or lyre) and *ugab* (pipe or flute), spoken of as early as Jubal, still survive, as also the *toph* (a small drum like a tambourine). After the Exodus there is mention of a number of instruments of undoubted Egyptian origin; the *shophar* (a curved tube of metal or ram's horn); the *hazozerah* (a long silver tube); the

he says, "I got me men singers and women singers, and the delights of the sons of men, as musical instruments, and that of all sorts."

nebel (a larger kinnor, somewhat like a guitar); the *azor* (another form of the nebel); the *chalil* (a sort of oboe or flageolet), and many other instruments, including a number of small ones of the percussion type.[3]

All these instruments were probably rather rude in construction and elementary in musical design, much like the instruments used among the common people of China. They were not intended to make music in the modern sense, but to mark the rhythm and make a noise rich in varied tone colour. In how far the instrumental accompaniment to solo and mass singing actually harmonized with the rude melody sung, whether it followed that melody in unison and octaves or even fifths, we do not know. If we can judge from current savage and barbaric practice, the instruments did little more than emphasize and elaborate the rhythm of the vocal part and follow its variations of force.

(*e*) *The Character of Hebrew Music.* The Hebrews were not a distinctively musical people.[4] They had no

[3] "There was not a drum to be found from Dan to Beersheba, nor a dulcimer either; and flutes, if used at all, were very rarely used. The only instrument that attained much favour, and this was the indigenous one, was the harp, which should more properly be described as a lyre than a harp, since it was a small portable instrument which the player carried about with him wherever he went, and of which we may form a fair notion if we remember the Rabbinical tradition that David used to hang his on a nail above his pillow when he went to bed. This little lyre was the great instrument in Israel and the reason it could be so was that the music of the Hebrews was in every sense of the word a vocal music. The voice transcended and outdid the instrument and the instrumental development stood still."—Rowbotham, "The History of Music."

[4] "The Hebrews, with such training, contracted blemishes with their excellencies. The former were few in comparison with the latter, but none the less existent. Their weakness lay in an

FIG. 21. Hebrew Ram's Horn Trumpets. (Shophar.)

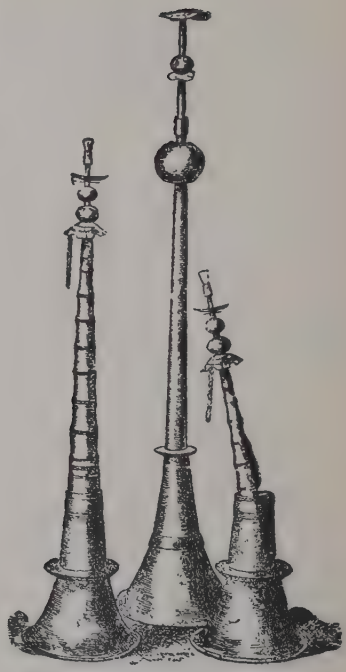


FIG. 23. Hebrew Silver Trumpet. (Khatsotsrah.)

FIG. 22.

HEBREW MUSICAL INSTRUMENTS

sense of its mystery, not to speak of its divine origin, such as one finds among the Egyptians, the Assyrians, and the Greeks. One gets no sense of magical values, or supernatural power, or of moral or immoral influence upon human character. It is simply a matter-of-fact means of creating interest in feasts and merrymakings, in military movements, in triumphal greetings, and especially in religious ceremonies. It was second only to sacrifice as a means of worshipping Jehovah, their King as well as their God.

One of the most characteristic phases of Hebrew music grew out of the parallelism of Hebrew poetry, its antiphonal rendering. From Lamech in Genesis to the Magnificat of the Virgin this literary form persisted. Miriam and her maidens sang antiphonally as probably did Deborah and Barak. The Priests and the Levites sang responsively and the people answered the temple choirs. The Christian Church borrowed the device and in turn handed it down through the ages to be exploited in our own day by leaders of gospel songs in great evangelistic meetings.

While we find references in the headings of some of the Psalms (Ps. 22; 56; 69) to some distinctive melodies that were recognized as standards and orally transmitted down through the generations, these were probably little more than chants subordinate to the text whose rhythm

utter deadness to the sensuous and artistic side of life; their excellence consisted in exalting its spiritual side to a height such as we shall never meet with again. Thus, unlike the Assyrians, the beauty of whose carvings has perhaps never been surpassed, the Hebrews not only despised the art of sculpture, but accounted the practice of it illegal and irreligious. Painting fared no better with them. Architecture was so poorly represented that Jehovah's tabernacle was for centuries a tent and Solomon had to hire a foreigner to build the temple."—Rowbotham, "History of Music."

they followed. They probably imitated models of contemporary nations in being mere elaborations of the cadences natural to varied emotions. None of them have come down to us in any form, in writing or orally.

The lack of any system of notation, the decay of music in the temple service in the centuries just preceding the coming of Christ, the catastrophal end of the temple ceremonies and the death of the majority of the fanatical priests and Levites at the destruction of Jerusalem, and the complete dispersal of any that survived, would account for the annihilation of all traces of this temple music. The simpler music used in the synagogues, more popular in character, may have been handed down for some generations, but no doubt succumbed to the controlling influence of the Greek and Roman people among whom they lived on sufferance.

If the tune "Leona," found in some of our hymnals and there ascribed to a Jewish source, is really Hebraic in origin, it is comparatively modern, as it is harmonically conceived and modern in structure.

Hebrew music was effective, like other music of the same stage of culture, because of its rhythm and its overwhelming noise. Imagine an orchestra of four thousand players with coarse, noisy instruments and the tumultuous chorus of unnumbered thousands of people as they shouted, "Praise ye the Lord; for he is good, for his mercy endureth forever." The attack on the nerves of such a stupendous rhythmical noise must have been overwhelming.

4. General Statements Regarding Pre-Christian Music

It may not be amiss to emphasize some outstanding characteristics of this ancient music.

(*a*) *Religious in Character.* While music was associated with all great public assemblies and occasions, it was preëminently religious in purpose and character. It was largely developed and controlled by medicine men, magicians and priests. However varied in moral and spiritual value these ultimate religious ends may have been, the music was always adapted to secure them.

(*b*) *The Artistic Conception of Music.* There was no genuinely artistic conception of music to be found anywhere in all these nations, despite the high general civilization developed in some of them, except in the later Grecian age, when religion had become decadent; but even that tendency was totally submerged by the rise of the Christian Church with its new emphasis of the supreme place of religion.

(*c*) In reviewing the music of these early nations, and that of savages as well, we have had data, meagre though they were, on its public or social side alone. In the very nature of things there could be no survival of music of an individual nature. The crooning of the women over their little ones and their domestic tasks, the piping of the shepherds watching over their flocks, the mating lyrics of the young people, the songs of the single families in their wilderness or rural isolation, must have differed from the music of the temples in important particulars, just as the simple and melodious religious folk-songs of the Middle Ages, as sung in private and in the smaller rural and village churches, differed from the elaborate cathedral music in the great religious centers.

But of this primitive personal music we have no record, and yet, the human musical impulse being so strong and universal, it must have existed. We shall find later that it was this submerged popular music which furnished the vital impulse and the raw material which in the later

centuries of the Christian Church broke the religious domination over music and made modern artistic music and more impressive church music possible.

REVIEW QUESTIONS

1. What evidence have we of the prevalence of music in the Patriarchal Age?
2. What proves conclusively the influence of Egypt on the music of the Hebrews?
3. What was the state of music under the Hebrew judges?
4. What indicates a wide use of music at the opening of David's reign?
5. What were David's great contributions to musical development among the Hebrews?
6. How did David's organization of the music of the tabernacle affect the future of Hebrew music?
7. Give the Hebrew names and the characteristics of the principal instruments used among the Israelites.
8. What characteristics distinguished Hebrew music?
9. What method of singing developed out of the parallelism of Hebrew lyrics?
10. Why have no Hebrew melodies survived?
11. What was the chief purpose of pre-Christian music?
12. What modern conception of music was entirely absent?
13. Was there likely any type of music in existence in these early nations other than the religious or the public ceremonies?

XVI

EARLY CHRISTIAN MUSIC

Supplementary Reading: Dickinson, "Music in the Western Church," Scribner's Sons, New York; Naumann, "History of Music," Cassell, London; Williams, "The Story of Notation," Scribner's Sons, New York; Rowbotham, "History of Music," Bentley, London.

I. Music in the Apostolic Age

(*a*) *The Affecting Musical Factors in the Beginning.* As we begin the study of the music of the Christian Church in its beginnings, we find the following fundamental factors:

(1) A decadent Jewish religion, the strong stream of whose early life was being dissipated in the sands of petty rules and minute ceremonial observances. Its organized ecclesiastical and intellectual activities had lost their fundamental sense of Jehovah and of direct obligation to Him; consequently its music, in itself rudimentary and undeveloped, had become mechanical and routinary, having no vital source of sentiment and emotion.

(2) A Grecian paganism whose mythology and religious rites no longer satisfied the philosophy and æsthetics of its keenly intellectual people, nor maintained its hold upon the common people; but whose music was theoretically and practically developed more fully, and had a broader and finer expressiveness, than that of any contemporary or previous nation.

(3) A new religious movement, strong with a supernatural vitality, full of high and inspiring conceptions and ideas, noble with ideals far beyond any known before and appealing to sentiments and aspirations and desires that stirred the uttermost depths of the souls of men.

It had an intellectually satisfying conception of a supreme God, righteous, just, pure, merciful, compassionate, even self-sacrificing. He was represented as descending in the person of Jesus Christ to human form and limitations to make himself comprehensible, and to save a fallen, broken, helpless, hopeless race and to give it the victory, not only over sin and its immediate and ultimate consequences, but over death itself, and to supply an assurance of transcendent and untrammelled life beyond.

Over against the crushing sense of sin stood the doctrine of uttermost salvation. In contrast with human selfishness appeared the divine self-sacrifice of Calvary. For this stupendous gamut of sentiment and emotion, there was an abiding demand for a corresponding musical expression.

These were the diverse forces which were certain to come into conflict, not only in doctrines and convictions, but in musical expression as well. It measures the power of the new faith that it not only survived the strain, but composited and transformed the opposing forces into sources of deeper power and broader appeal.

(*b*) *The Period of Transition from Hebrew to Greek.* There are no data, or at least only traditional ones, regarding the use of music in the apostolic age beyond Paul's references to "psalms and hymns and spiritual songs" (Eph. 5:19 and Col. 3:16). These establish the use of music in the meetings of the early disciples. What the character of that music was we can only surmise. It may well be that it was not at all uniform, that the congregations in Jerusalem and elsewhere in Judea used the traditional psalms sanctioned by their Master's quotations and vocal participation, while in Greece, in Grecian Asia Minor, and elsewhere in the Roman Empire,

the locally current melodies and style of music were accepted, just as the Salvation Army uses different music in England and America.[1]

But as the Jewish part of the Christian Church became more and more subordinated to the rapidly spreading Gentile part, and as the final dispersion of the Jews broke up the very foundations of the Jewish system of liturgy and ceremonial, the Greek musical influence must have become more and more regnant. The books of the New Testament, with the possible exception of the original of Matthew's Gospel, were written in Greek, the preaching for the most part was in Greek, and a little later all the earliest liturgies were in Greek.

The new life of the Christian faith could not accept the rigid formalism and synagogal routine of the pharisaical and priestly conventions and rules, but found the greater freedom and larger expressiveness of the Grecian music more practical and congenial. In the Christian hymnody and music were combined the sentiments of prayer and praise of the Hebraic liturgy and the flexibility, adaptability, and expressiveness of the Grecian music. This was heightened and deepened and intensified by the new Christian hope, by the new joy of conscious salvation, and of the realization of age-long divine promises and aspirations, and by the extraordinary im-

[1] The same process may be observed among the congregations of foreign immigrants. The German Methodists and German United Brethren in the early and middle years of the nineteenth century, for instance, soon adopted the American spirituals, adapting German texts to them. They still sang the German chorales, but as the decades passed American hymn tunes displaced them, until now, after little more than three-quarters of a century, there is little typical German music to be found outside of the more narrowly liturgical churches presided over by pastors born and trained in Germany.

mediateness of the communion through Jesus Christ with God, no longer the Jehovah of the Jews and their proselytes alone, but the Lord of all nations and tribes. The content,—the sentiments, the thought,—was essentially Hebraic in spirit, but the form had the Grecian freedom.

(*c*) *The Radical Change in the Character of Worship.* In place of the rite and ceremony and bloody sacrifice, there arose spontaneously the meeting for prayer—spontaneous, extemporaneous, individual, prolonged prayer (Acts 12:12). There were meetings for testimony, mutual exhortation and instruction, and for speaking in unknown tongues, as well as for the simple rites of baptism and the Lord's Supper. The new wine of the Christian faith was too mighty for the old Hebrew bottles.

(*d*) *The Like Change in the Music.* This was as true of the music as of the service. There was undoubtedly the singing of the Hebrew "psalms" and of the "hymns," or canticles, of the Old Testament, but there was also the use of new Christian "spiritual songs," born of the rapt experiences of saints either alone, or in the assembly of the saints. We do not know what the "glossolalia," or "the gift of tongues," was, but think of it as an expression of high ecstasy for which human language was inadequate.

When such inspiration was vouchsafed by the Spirit of God, fresh, rhythmical, lyrical expressions of personal religious experience, and even of freshly realized religious truth, accompanied by appropriate cadences in the style to which they were accustomed, could hardly be absent. If religious feeling during the Reformation, during the Wesleyan movement, during the great American revival period stretching from Jonathan Edwards to D. L. Moody and beyond, each produced its harvest of

sacred song, how much more should the first century of the Christian Church have been prolific of "spiritual songs"?

The need for "spiritual songs" is well expressed by Professor Dickinson in his "Music in the History of the Western Church": "The worshippers of Christ would not remain content with the Hebrew psalms, for, in spite of their inspiring and edifying character, they were not concerned with the facts on which the new faith was based, except as they might be interpreted as prefiguring the later dispensation. Hymns were required in which Christ was directly celebrated, and the apprehension of His infinite gifts embodied in language which would both fortify the believers and act as a converting agency."

(*e*) *The Simplicity of the Music.* Yet there was little temptation to undue elaboration of hymnody or music. The very spirituality of the new faith made ritual or liturgy superfluous and music almost unnecessary. Singing (there was no instrumental accompaniment) was little more than a means of expressing in a practicable, social way the common faith and experience. It had no divine or magical power in itself.

The early Christians had much more powerful agencies at their command, their new methods of expression,—personal public prayer, testimony, prophecy, the gift of tongues. There was no ceremony or ritual to adorn. In the first generation the intensity of the content of amazing doctrine and depth of experience ignored the idea of form. There was little need of laying stress on music.

(*f*) *The Lack of the Lyric Element in the New Testament.* This may explain why, while the Old Testament, even outside of the Book of Psalms, is full of songs of a definitely lyric form, there is little or nothing of the kind in the New Testament or in the writings of the early

fathers. There are the canticles connected with the birth of Christ, but in more senses than one they are Hebraic and not Christian. There are passages in the epistles, particularly in those of Paul, that are poetical and even lyrical in spirit, but they are incidental and not in definitely lyrical form. The great choruses of the Book of Revelation are a part of the stupendous symbolical panorama and not independent lyrics to be sung in services like the Psalms.

(*g*) *The Early Spiritual Songs Were Ephemeral.* Whatever may have been the number or the general use of these "spiritual songs," it was evidently not in the divine purpose that they should be perpetuated. They may have been too ecstatic, too hysterical, too intense for the use of the churches through the ages. They may have lacked the necessary literary form and artistic grace, being born among the more or less illiterate class in which Christianity first prospered. Like the "camp-meeting ditties" of the early nineteenth century and the majority of the succeeding gospel songs of the American Church, they may have temporarily served their day and generation efficiently, only to be set aside and forgotten as the conditions and needs of the growing Church changed through succeeding generations.

2. Music in the Patristic Age

(*a*) *The Nature of Christian Services.* As we have seen, the apostolic church apparently laid little stress on the use of music. The purely Jewish congregations continued the synagogical use of the psalms, in a responsive way with the Hebrew chants, indeed continued the synagogical code in general, adding the baptismal formula, the Lord's Prayer, and the Lord's Supper. The Greek congregations, owing to the considerable Jewish element and

to the sanction of their Lord in song and quotation, sang the same psalms, but probably with current Greek chants based on accepted modes already somewhat fully organized.

(*b*) *The Spiritual Songs Written in Greek.* Paul's reference to "spiritual songs" shows there were new songs in vogue among the Christians to which Pliny the Younger may have referred in his letter to the Emperor Trajan about 112 A. D. By the middle of the third century, 250 A. D., Eusebius reports a profusion of these songs of which only several survive. There can scarcely be any doubt that they were all written in Greek and sung to accepted Greek chants. This was consistent with their practice in other phases of church life. They adopted Greek meters for their "spiritual songs." They based their architecture on prevalent Greek and Roman models. They presently accepted pagan customs, ceremonies, and festivals in modified and spiritualized forms.

(*c*) *Discrimination Among Greek Modes.* In accepting Greek chants and modes, they used great discrimination. Certain modes were found better adapted to Christian use than others—had more nobility and dignity. Other modes were forbidden as too secular and even wanton. The Greeks themselves recognized the difference as we have seen. That the Hebrew chants were finally submerged is clear from the full ecclesiastical adoption of certain Greek modes before the close of the fourth century.

(*d*) *Instruments Not Used.* The danger of adopting unfitting modes and melodies was all the less that they were chiefly used in instrumental music which was not allowed by the Christians in public or in private life. No mention is made of instruments by early writers of the Church. When reference was made to them later, it was

with denunciation. Clement of Alexandria says, "Only one instrument do we use, *viz.*, the word of peace wherewith we honour God, no longer the old psaltery, trumpet, drum, and flute." Later Ambrose chides those who preferred the lyre and psaltery to singing hymns and psalms. Jerome insists that, "A Christian maiden ought not even to know what a lyre or flute is, or what it is used for." The frivolousness and unholy pagan associations connected with instrumental music in that decadent age had probably much to do with this denunciation of instruments not only in public worship, but also in private life.

(*e*) *The Development of a Formal Liturgy.* A most important change that occurred in the immediately succeeding centuries was the development of a formal and elaborate liturgy connected with a growing emphasis of the priestly class. The informal spontaneous meeting of the apostolic age gave place to a solemn and dignified ritual. While this still contained Hebrew elements, there were new canticles and hymns introduced of a more definitely Christian character. These were

(1) "The Gloria in Excelsis," often called "The Greater Doxology" to distinguish it from the "Gloria Patri." It was based on the song of the herald angels of Bethlehem. Traces are found of it early in the second century.

(2) "The Gloria Patri," known as "The Lesser Doxology." The first part of this hymn was the prevalent doxology of the whole Christian Church. The last part which emphasizes the eternity of Christ was added in the West in answer to the Arian heresy.

(3) "The Trisagion," also called "The Cherubical Hymn" was based on Isaiah 6:3 and Revelation 4:8.

(4) "The Hallelujah" which was a short antiphonal hymn, the officiating priest intoning the "Praise Ye the

Lord" and the congregation responding, "The Lord's name be praised."

(5) "The Benedicite," a paraphrase of the forty-eighth Psalm.

(6) "The Nunc Dimittis," based on the salutation to the divine Babe by the aged Simeon (Luke 2:29).

(7) "The Magnificat," the song of the Virgin Mother in response to the salutation of Elizabeth (Luke 1:46).

(8) "The Te Deum," or "Te Deum Laudamus," the Latin version based on a more ancient Greek original. The triumphal hymn of the Christian Church.

(9) "The Benedictus," the song of the priest Zacharias, father of John the Baptist on the birth of his son.

The Hebraic, respectively Greek, origin of each is evident enough and illustrates the two lines of heritage of the hymnody, and undoubtedly of the chants of the developing Church.

(*f*) *Antiphonal Singing.* One of the inheritances from the Hebrew factor in the development of the music of the Church was antiphonal singing, for which the parallelism of the psalms gave large opportunity. Pliny's letter, already alluded to, describes the Christians of Bithynia assembling before daylight to sing hymns of praise to Christ alternately. There is a tradition that Ignatius, the Bishop of Antioch, in the second century introduced this responsive singing into the churches of his diocese, because in a vision he heard angels singing after this manner. It was later introduced into the Western Church and so became an integral part of liturgical services everywhere.

(*g*) *Pedagogical Use of Music.* Paul's phrase "teaching and admonishing one another" in connection with "psalms and hymns and spiritual songs" shows that he approved their use for propagandist and educational pur-

poses. When one remembers that they were sung as recitative chants, their use for this purpose seems very practical and efficient. This method of popular teaching was later very largely and effectively employed by the heretical sects who popularized their misleading doctrines in this way.

(*h*) *Two Important Reactions from Heretical Hymns.* This led to two important reactions on the part of the Church:

(1) The gradual abolition of independent singing by the congregation and its monopoly by choirs in order to control the music of the service more completely and prevent the use of these obnoxious hymns, and

(2) The stimulus it gave to the writing of orthodox hymns for the informal use of the people.

(*i*) *The Elaboration of Liturgy and Music.* The organization of choirs and the transfer of the music of the Church to them was not only a precaution against the lyrical activities of the heretics. By this time the great centers of population had given opportunity for large congregations whose worship demanded greater and more minute organization because of their numbers. Moreover, they were inevitably influenced by the elaborate and spectacular rituals of the pagan temples all about them.

The sacerdotal conceptions of this pagan organization and the autocratic spirit of the Roman Empire had their influence on the leaders of the Christian Church, and its organization became more and more rigid and the control of the priestly class over the Church more complete.

The musical service became more elaborate as the liturgies developed and only organized and trained bodies of singers could do it justice. The people might sing privately, in holy pilgrimages and processions, but in the public service they were limited to shouting short phrases

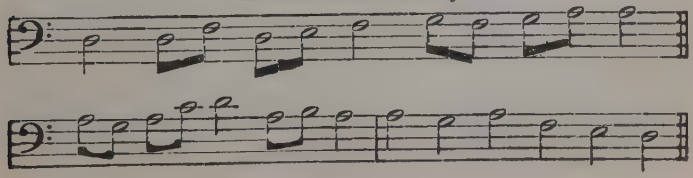
in response to the priest or to certain passages of the music of the choirs.

(*j*) *The Ambrosian Reforms.* While there had been a general acceptance of the Greek modes, or scales, there had been no uniformity of action regarding them. The Church was spread over a vast territory and communication between different regions was difficult. Hence there arose different usages and liturgies, such as that of James in Jerusalem and of Mark in Alexandria. Probably there was even greater variation in the character of the music used. This was particularly true in the West.

Towards the close of the fourth century, Ambrose, Bishop of Milan, undertook a reorganization and reformation of the music in his diocese, the general lines of which seem to have been generally accepted throughout the West.

The details of the ordering of the music are not clear, and are subject to much dispute. He probably introduced the Eastern manner of antiphonal singing. New scales, based upon the four principal Greek modes, but simplified to meet the limited musical powers of his singers, were brought into use. The four modes selected and modified were the more dignified scales of the Greeks, and which were deemed more fitting for religious uses. The other modes were used in heathen temples and theatres, but were forbidden to Christians. That the music so modified was more melodic and more impassioned and emotional than elsewhere[2]—as in Alexandria, for in-

[2] An Ambrosian Melody.



stance, where under Athanasius the psalms were rendered in a semi-musical recitation, to use Augustine's phrase, "more speaking than singing,"—seems to be indicated by the report of Augustine: "How I wept at the hymns and canticles, pierced to the quick by the voices of thy melodious church! Those voices flowed into my ears, and the truth distilled into my heart, and thence there streamed forth a devout emotion, and my tears ran down, and happy was I therein." (Confessions, Book IX, Chapter 6.)

The changes made by Ambrose may have been local and their general importance may have been greatly exaggerated by historians, because of this glowing, rhetorical description of the perfervid Augustine.

REVIEW QUESTIONS

1. What three fundamental factors present themselves at the beginning of the Christian Church?
2. How were the Hebrew musical elements submerged by the Greek?
3. What radical change was there in the form of worship as compared with the Jewish?
4. Why was the music necessarily simple?
5. How does the New Testament compare with the Old as regards the lyrical element?
6. Why have not the "spiritual songs" of the early Church survived?
7. What were the characteristics of the church music of the Patristic Age?
8. In the development of the liturgy what new canticles appeared?
9. What method of singing passed over from the Hebrew to the Christian Church?
10. What important reactions grew out of the heretical propagandist hymns?
11. What important influences contributed to the development of an elaborate liturgy?
12. What were the Ambrosian reforms?

XVII

CHURCH MUSIC UNDER PAPAL AUSPICES

Class Room Suggestions: If it is possible to arrange to take the class to a Roman Catholic service where the Gregorian chants and the Mediæval masses and motets are used, it will give a more vivid realization of the music discussed in this and the following chapter than can be secured in any other way.

Supplementary Reading: Grove, "Dictionary of Music and Musicians," Art. "Gregorian Music" and "Gregorian Tones" and "Plain Song," Presser, Phila.; Rowbotham, "History of Music," Bentley, London; Naumann, "History of Music," Cassell, London; Dickinson, "Music in the Western Church," Scribner's Sons, New York.

1. *Early Papal Efforts at Progress in Church Music.* It may well be that Augustine's reference to the work of Ambrose is a mere chance glimpse at the local musical activities going on all over the Church indicating general progress in an organized way. Other glimpses are vouchsafed us. Pope Celestine established antiphonal psalmody, like that introduced by Ambrose in Milan, during his reign (422–432). The papal choir was organized about this time. Pope Leo I established a community of monks who had charge of the canonical hours.

In 580 some Benedictine monks whose monastery had been destroyed by the Lombards were assigned by Pope Pelagius to the musical services and provided singers for the papal chapel. A school for boys was organized in connection with this college of men singers, who were recognized as subdeacons, where singers were trained for the pope's choir and given instruction in other branches.

2. *The Gregorian Reforms and Organization of Music.* It will be seen that it is not likely that Pope Gregory the Great (590-604) had initiated all the im-

provements associated with his name, but that he probably simply organized and fixed the details of progress made during the centuries preceding him of which we have so few records.

During his administration the accepted hymns of the Church were probably revised and certainly officially fixed in form. The increase of the scales in number and extent and the formulation and fixing of their several series of steps and half steps were officially sanctioned and made obligatory. These scales were known as the "Gregorian tones" and controlled the music of the Church through the ages, even yet being the norm of Catholic ritual music and recognized by ultra-liturgical elements in other liturgical churches.

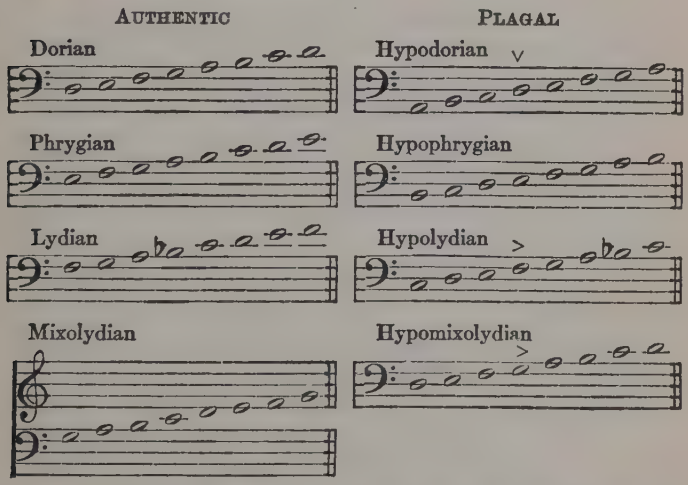
The liturgy, having been completed just before or during the early years of his reign, was given a musical setting throughout, in the form of liturgic chants called the Antiphonary of St. Gregory. This setting was made as obligatory as the liturgy itself, thus compelling uniformity of ritual and music throughout the Western Church. He founded, or more likely extended, the music school in Rome which, through the trained singers sent out to all the great religious centers, helped to unify and fix the musical usages of the entire Church.

The work of Ambrose at Milan was officially limited by his diocese and his influence outside was moral, not ecclesiastical. Even aside from his great, masterful personality, Gregory's authority was world wide and preeminently official and his improvements in church music, or his sanctioning and authorizing for all the Church the improvements locally made in Milan, Rome and elsewhere, had immediate acceptance and implicit obedience, and formulated and fixed the liturgic music of the whole Western Church.

3. *The Gregorian System.* The Gregorian system of church music, therefore, is exceedingly important and its characteristics should be kept well in mind.

(*a*) It is based on eight modes, originally Greek, four with the dominant note, or *mese*, on the first tone of the scale, called authentic, and four with the dominant note on the fourth tone of the scale, called plagal.[1]

The following modern notation of these Gregorian scales will make them clear.



It will be noticed that the plagal scales begin on the

[1] The important note in the authentic scale is the first; in the plagal it is the fourth, the same as the first of the former. The plagal scale. therefore, moves upward to the fourth, while the authentic returns to the first note, having the character of rest. Ambrose expresses it in the following rather fanciful rhetoric: "Without requiring aid, the authentic unites with the plagal at its middle or fourth tone, representing, as it were, self-relying man; whilst the plagal, in endeavouring to reach its authentic tone, has the character of dependent woman."—See Naumann, pp. 187-188 for sample Gregorian melodies.

fourth below the first tone of their respective authentic scales. This brought down the range of the melody.

(*b*) The Gregorian chant differed from the Ambrosian in that it was no longer recited, nor controlled by the quantity of the vowels in the syllables, but took the form of continuous melodies with tones of practically equal length.[2]

(*c*) These chants had no independent rhythm except such as arose from the natural rhythm of the text. The effect of rhythm, so emphasized in the music of the ancient peoples, was no longer permitted. They had no form in the modern sense, their length and relation of parts depending entirely on the text.

(*d*) There was no harmony connected with them such as is found associated with the chants contained in our hymnals. They were unisonal, or homophonic, all voices taking the same tones.

(*e*) They were vocal only, there being no instrumental accompaniment of any kind. As the range of the Gregorian melodies never exceeded an octave and as the plagal modes were a fourth lower than the authentic, it will be seen that there was no vocal strain.

(*f*) The conception of church music underlying the Gregorian system is sedative and calming. The stimulating, exciting character of the earlier pagan music was repudiated. The effects the church fathers sought were to grow out of the coöperation with a worshipful, impressive, spiritual liturgy of quiet, dignified, awe-inspiring sounds of no particular distinctiveness or pronounced character, lest they distract the attention from the spiritual purpose in view. There was no definite physical

[2] With the development of music through the centuries and its consequent elaboration, this equality of tone lengths gave place to more complicated melodies.

appeal in it. It calmed the physical in order to stimulate the spiritual suggestiveness. While there was a certain jubilance in the singing of such hymns as the "Te Deum," it was rendered with a noble restraint based on an awful sense of the presence of the Almighty. The effect of its elevated, inspiring passages was modified by the introduction of passages contemplating the sacrifice of Christ or expressing the profound needs of the soul.[3]

(*g*) These chants were studied with the minutest care. Nothing was left to spontaneous impulse or individual feeling. Every phrase, every nuance, every shading of tone by priest or choir was studied and officially prescribed. The system was rigid, inflexible, no doubt often sheerly mechanical, but was none the less a very triumph of the adaptation of means to a clearly conceived end,—the expression and spiritual deepening of worship. The other purposes of the public service,—inspiration, education, evangelization,—all were ignored.

4. The Development of Musical Notation

(*a*) *The Lack of Adequate Notation Felt.* One of the astonishing phases of the creation of this system, whether by gradual growth or by deliberate and conscious effort, is that there was no musical notation upon which to base it. The complaint of Isadore, the contemporary of Gregory, makes the difficulty plain: "Unless sounds are retained in the memory, they perish because they cannot be written." All this treasury of chants, ordered and

[3] Mendelssohn had no great admiration for the Gregorian Plain Song. He writes in 1831 from Rome: "It does irritate me to hear such sacred and touching words sung to such insignificant, dull music. They say it is *canto fermo*, Gregorian, etc. No matter. If at that period there was neither the feeling nor the capacity to write in a different style, at all events we have now the power to do so."

classified, with all the established phrasing and regulation of tone had to be orally transmitted and made permanent in human memory alone.

The magnitude of the task of developing such a work as Gregory's Antiphonary without the help of notation in seizing happy phrases of melody, as they rose in the mind of the monkish musician and fixing them once for all in the written character, can be comprehended by the composer alone. Then to hand over to contemporary churches and to unborn generations this musical liturgy without error or irresponsible change on the basis of memory alone was another extraordinary feat. The only explanation of this lies in the fact that special orders of monks were intrusted with the preservation, singing, and teaching of these chants.

(*b*) *Lack of Notation Crippled Musical Progress.* But so long as there was no notation, no visual aid to the musical thinker, there could be but little development in musical art. After all, these chants were one part musical compositions, mostly very short and very simple. Just as words make consecutive thinking possible, so musical notation was necessary to extensive musical composition. It was not the lack of musical ability that was wanting for the composition of the larger forms of music, but the lack of a definite method of expression for the thinking as well as the writing out of music.

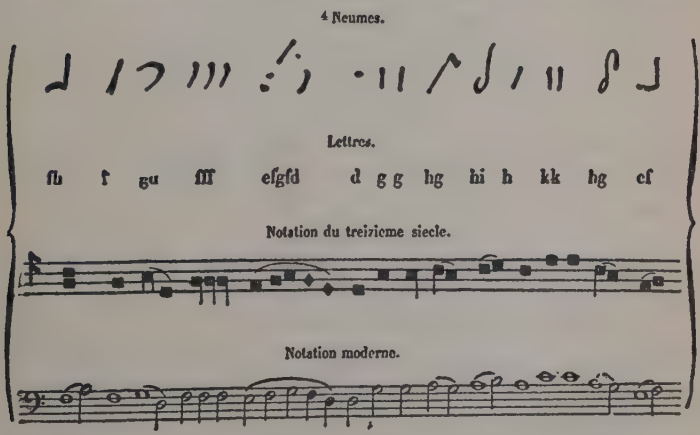
(*c*) *Early Efforts at Notation.* The impulse to create a musical notation was felt in all ages. As early as 2700 B. C. the Chinese represented the notes of their scale by signs somewhat like those used in the printed characters they now use. The Hindoos used Sanscrit characters in the same way. The Persians used a staff of nine lines each of a different colour.

The Greeks developed a very complicated system of

notation based on the letters of their alphabet which were inverted or modified in various ways to express time values and rests, varying for vocal and instrumental music. They had no less than seventy musical signs for voice and instrument. Some writers claim they had 1,620 signs. The Romans used the first fifteen letters of their alphabet following the Greeks very largely. In the sixth century, church musicians reduced the number of letters to seven, the number of tones in the octave.

(*d*) *The System of Neumes.* The need of written music was so emphasized by the effort to transmit the Gregorian musical liturgy that a series of musical signs somewhat like shorthand characters were invented called *neumes* which represented not single notes, but groups of sounds, somewhat like the turn (∾) and the trill (∿) in modern use. There were many of these in use, but the meaning of them has largely been lost.[4]

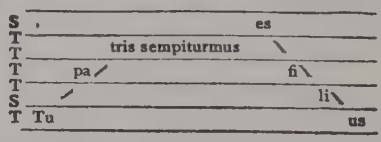
(*e*) *The Beginnings of the Staff.* The *neumes* seem not to have given any idea of absolute pitch and so some



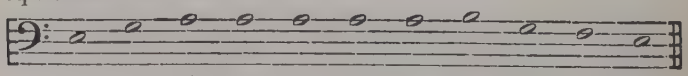
Neumes, Letters, Notes of Thirteenth Century and Modern Notation.

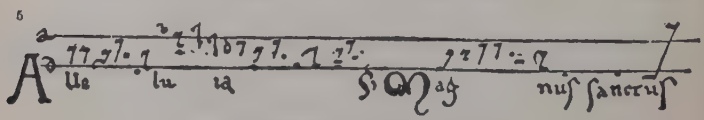
one introduced a line to fix an established pitch above and below which the *neumes* were placed in a position indicating the relative pitch to a fairly clear degree and so gave the fundamental suggestion for our modern staff: A red line came first denoting the pitch of F below middle C. Then the second line was yellow locating middle C.

Colour not always being at hand, the lines were drawn in black[5] and the letters F and C written at the beginning of the lines. This later gave rise to the F clef and the C clef in various positions on the staff, which still survive in instrumental music. A second line to make the relative pitch even more certain naturally followed. In this way the mere pitches of the several tones of the melody could be fairly well indicated as the range of the chants rarely exceeded the octave.

(*f*) *The Further Development of the Staff.* Very logically and naturally if two lines were clearer than one, then three would be better than two, and four than three. There was a good deal of experimentation with different numbers of lines. Hucbald of Saint Amand, Flanders, in 930 used seven lines and wrote the syllables of the chant between them to indicate their varied pitch, not using the lines at all. 

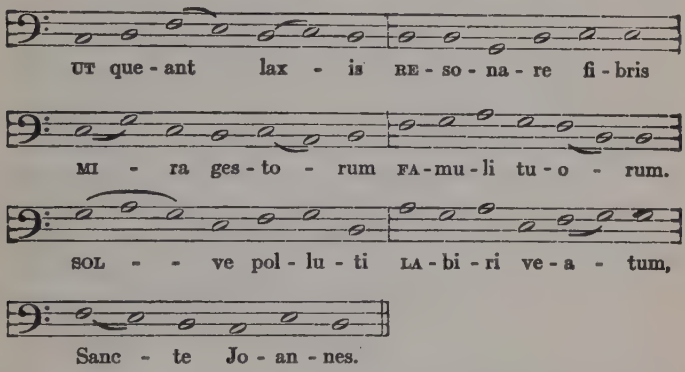
was his equivalent for our





Neume Notation, Period of Guido.

It remained for Guido Arentino to sum up the results of all these varied attempts in a four line staff using both lines and spaces to indicate pitch. He was the father of the sol-fa system, having taken the opening syllables of each line of the hymn to St. John which happened to fall on successively higher notes as a mnemonic device.



Ut, re, mi, fa, sol, la. The si or ti was added later. In most countries the *ut* has been displaced by the vocally more practical *do*. As the notation became more and more definite the *neumes*, representing groups of notes in shorthand fashion, lost their value and were abandoned while square or lozenge shaped characters were used to indicate individual tones. These were later made open instead of solid.

Further details for time values, rests, clefs, the five lines, the added lines were introduced from time to time until our present elaborate musical notation became fixed. Even within recent memory, efforts have been made, such as the three line staff, each line representing an octave, the tones of each octave being indicated on its individual line by means of the numerals one to seven, used in the public schools of Germany a century ago. The shaped

or buckwheat notes, which were very popular in America three-quarters of a century ago and are yet used in some parts of the South, and the Tonic Sol-fa system of Dr. Curwen, still in popular use in England, chiefly in Nonconformist circles, have been widely used.

5. The Introduction of the Gregorian Liturgy and Music

The main lines of the Roman liturgy and its music had been formulated and fixed by the end of the sixth century. The musical energies of the Church now spent themselves in establishing it throughout the Church, displacing antagonizing local usages, especially the Ambrosian, which lingered in Lombardy of which Milan was the capital. The partizan feeling so aroused, and the necessity of clear formulation for teaching, combined with the papal self-assertion to crystallize and fix it, like the temple music among the Egyptians.

Cantors went out from Roman singing schools into great and influential monasteries and helped in the organization of new schools in new missionary territory, everywhere singing and teaching the Roman chants. The numerous Gregorian missionaries among the heathen and their successors were musically trained and adept in singing the Gregorian chants.

Charlemagne, the great King of the Franks (768–814), a loyal adherent of the Roman hierarchy, and accepting all its teachings and usages, included their music in his interests,[6] sent his singers to Rome for instruction, and

[6] Charlemagne, after conquering Desiderius, King of Lombardy, the protagonist of the Ambrosian system still used in the churches of Milan, destroyed every copy of the Ambrosian chant and hymn-books that he could find. Clergy and others, resisting this extirpation of the Ambrosian system, were put to the sword!

secured competent singers to teach in prominent monasteries and cathedral choirs throughout his dominions. He also established great singing schools at Metz and Soissons. Boniface, the Anglo-Saxon monk, the leading missionary to the Germans, taught the Roman chants to his Thuringian and Hessian converts.

REVIEW QUESTIONS

1. What were the musical activities of the early popes?
2. On what lines did the Gregorian reforms proceed?
3. Give an outline of the Gregorian system.
4. What lack made the development and propagation of the Gregorian system a stupendous feat, and why?
5. How did the lack of an adequate system of notation cripple musical progress?
6. What early systems do we find in use?
7. What were the *neumes?*
8. What was the beginning of the staff?
9. What monks are credited with valuable suggestions in the development of notation?
10. Who first used syllables to indicate relative pitch?
11. What efforts have been made during the last century to simplify the present system?
12. How was the use of the Gregorian system made universal in the Western Church?

XVIII

MEDIÆVAL CHURCH MUSIC

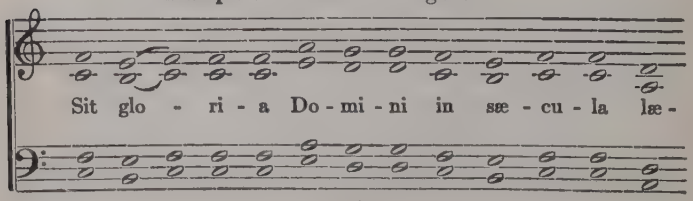
Supplementary Reading: "Oxford History of Music," Vol. I & II, Clarendon Press, Oxford; Dickinson, "Music in the Western Church," Scribner's Sons, New York; Naumann, "History of Music," Cassell, London; Chappell, "History of Music," Chappell, London; Parry, "The Art of Music," Appleton, New York; Lavignac, "Music and Musicians," Henry Holt, New York; Grove, "Dictionary of Music and Musicians," Arts. "Madrigal," "Mass" and "Polyphonia," Presser, Phila.; Rowbotham, "History of Music," Bentley, London; Baltzell, "History of Music," Presser, Phila.

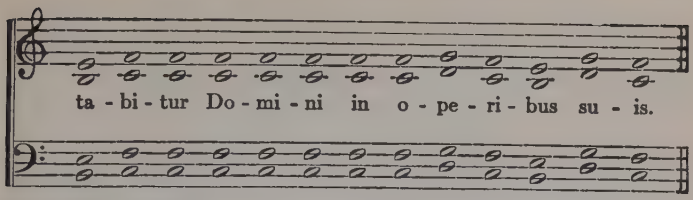
1. The Age of Musical Apprenticeship

While the first millennium of the Christian era drew to its close, bringing foreboding to those afflicted with the superstition of mystical mathematics, signs of musical progress began to appear, not in Rome, rigid with devotion to the formulas of the past, but in the North, especially in northern France and in Flanders.

(*a*) *The Organum.* Hucbald (840-930), a Flemish monk of great musical enthusiasm, whom we have seen busy in experimentation in musical notation, evidently wearied of the monotony of unisonal chanting and introduced the custom of adding voices following the melody in fifths and fourths below. He probably noticed the spontaneous instinct of singers of low voices in singing the melody a fifth or a fourth below. This custom was called "organum."

Example of Hucbald's "Organum"

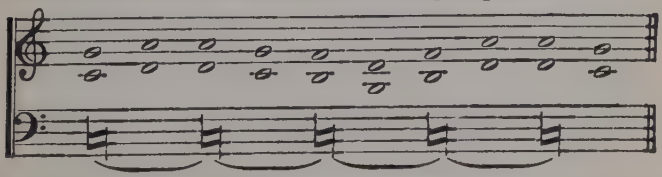




This he called *organum*, or *diaphony*, although "in our time the word 'cacophony' would seem more appropriate," as Lavignac suggests.[1]

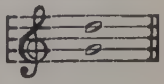
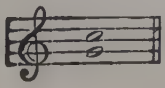
Modern ears, accustomed to the progression of chords along lines of clear relations between them, find consecutive fifths, and even consecutive fourths, very offensive, because they suggest the progression of unrelated chords.

Hucbald also evidently took the growling of one continuous note, by persons who had no greater range, as a foundation and so anticipated our organ point.



While the effect was inharmonious and rude, not to say barbaric, it was the germinal idea of our harmonic system.[2]

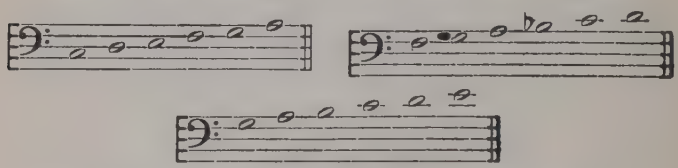
[1] Lavignac, "Music and Musicians."

[2] "It also happens that the human mind is so slow to develop any understanding of the effects of harmony, that men only learned to endure even infinitesimally discordant chords by slow degrees. The combination in which there is the least element of discordance after the octave is the fifth,  and after that the fourth,  and these two were the

Hucbald having blazed the path, other musicians produced other combinations which were called *organum profanum,* as they had no ecclesiastical sanction. They added thirds and sixths to the unisons, fifths and fourths. Later still a system consisting of thirds and sixths in three parts, which took the place of the fifths and fourths, was introduced which was called *faux bourdon* and which was much more pleasing, though monotonous.

(*b*) *The Hexachord.* But Hucbald was but a John the Baptist to Guido Arentino (995-1050), an Italian monk connected with the Benedictine abbey of Pomposa near Ravenna, who, as we have already seen, introduced a staff of four lines—all that was needed when the range of melodies was rarely more than an octave. He provided a transitional system of scales between the modes and our modern scales in the hexagraphs which, probably already in use, he systematized and defined more fully.

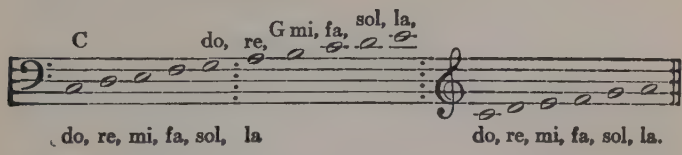
It is to be remembered that as yet the octave scale had not been adopted. Instead there were three hexachords, or scales of six tones, recognized, based on C, F and G.



When the melody extended beyond the "la" of the C

first which men learned to endure with equanimity. It took them centuries to settle down to the comfortable acceptance of such familiar combinations as thirds and sixths, and it took fully a thousand years after their sense of harmony had begun to dawn before they could accept the simplest discords without some preliminary device to save the ear from being too roughly assailed by the sudden jar."—C. Hubert H. Parry in "The Evolution of the Art of Music."

hexachord, there was a change, or mutation, to the hexachord of G and "la" of the C hexachord became the "re" of the G hexachord.



It will be noticed that on this system the half step could only be expressed by mi-fa; there was no si-do, as with us.

Our present notation seems complicated to many people, but it is simplicity itself compared with Guido's system of solmization, or the method of reading new music by use of the syllables. But in all justice it must be compared with the notational chaos it displaced. It made the learning of new chants, which had been a most laborious task for both teacher and pupil, so easy that his fellow monks suspected him of dealing with the Arch Enemy and expelled him.[3] The reigning pope, Pope John XIX, heard of the success of his reforms and invited him to Rome. When the pontiff himself was soon able to read music of the liturgy as easily as its text, he recognized the great value of Guido's work, sanctioned its use throughout the Church and reinstated him with high honour in his abbey.

This new notation with its syllabic hexachords, began a new era in the development of music. Not only singers, but composers were enabled "to hear with their eyes and see with their ears" and had an ocular sense of the rela-

[3] His extremely sharp and sarcastic tongue was no small factor in his unpopularity. The man who began his treatise on sight reading with the statement: "Of all living men, singers are the most fatuous," would not have won general liking in any day or generation.

tions of tones to each other, enabling them to undertake the composition of music of a more complicated character, thus assuring new effects.

(*c*) *Contemporaneous Popular Music.* We have the data for the development of church music, slight as they are, for the literary ability of those ages was monopolized by the clergy, but we have little or no information regarding the music of the common people during these centuries. The Church used no instruments of any kind, with the occasional exception of the organ, yet they were used by the people for secular purposes. They had not only flutes, but also pan-pipes, or syrinx, a very ancient instrument often translated "organ." They had bagpipes which permitted the sounding of two tones at once. They had a variety of stringed instruments on some of which chords could be struck. Was Hucbald's experiment simply a churchly application of what the people were doing?

What they played and sang we do not know, but may be quite sure it was tuneful and rhythmical in character. During the period between 1000 A. D. and 1400 A. D. stimulated by the Crusades, there was a great tide of secular song, martial, sentimental, and roystering. Unfortunately while the text of many of these survive, the music, still written in *neumes,* has not been fully deciphered, and we are dependent on inferences and conjectures for an idea of its character and development.

Judging from the forms and literary style of the surviving lyrics, it must have been full of studied fancies and fantastic nuances, becoming ever more forced, stilted and intricate. The troubadours, the petted favourites of people of all classes, royal or serf, were in evidence everywhere and carried these songs from land to land. The

Minnesingers and Meistersingers were their worthy successors in Germany.

(*d*) *The Development of Discant.* The effect of the Hucbaldian harmony was mental rather than musical, for it was a strengthening of the unison rather than a real harmony, the fifths being overtones of the fundamental and the fourths inversions of the fifths. The suggestion of other parts than the unison did not lead in the direction of harmony, but to the singing of other melodies at the same time and experiments were in complicated melodic rather than in harmonic lines.

This took the form of singing some well-known secular melody above the established ritual melody which was called "discant." The main melody or *cantus firmus* was always sung by the tenor. The discant melody was sung by a higher voice. The florid development of the discant, calling for uniform time in the singing, compelled mensural notation,—*i. e.*, divisions of time. A modern example would be given if a high voice should sing "The Old Folks at Home" while the rest of the singers rendered "Take it to the Lord in Prayer." The combinations were often most shocking, the discant consisting of purely secular, often ribald songs with their offensive texts.

While harmonic elements were appearing in a rudimentary form, the chief emphasis was placed on melody, and the tricks of the troubadours paved the way for the singing of different melodies, at first two or three, afterwards four or more, at the same time. Of course, there had to be concord between these independent melodies, but this result was reached empirically, by ear, not by definite harmonic rules. Singers that still found pleasure in the diaphony of Hucbald would not be disturbed by the lack of proper chord progressions.

Lavignac insists that Hucbald set back the clock of musical development something like five centuries by his *organum,* for it prevented a proper harmonic evolution for that time. But melody is the life of music and harmony but its body and it was important, nay, inevitable, that melody should be developed first. Moreover the polyphonic style served indirectly to develop the science of harmony.

While not distinctly formulated, little by little the need of concordant combination of melodies gave rise to empiric, rule of thumb, criteria of the proper progress of the several parts in order to prevent the undesirable discord. The feeling for harmony was preparing and the raw material for its theory being gathered.

For several generations there were no formal harmonic relations between the several melodies of a polyphonic composition. It was enough that they could be sung at the same time without distressing discord.

This discant singing was by no means always concordant. We have rather heated testimony to this fact from both churchmen and theorists. One critic compares these extemporaneous singers of discant to drunken men who find their way home, but do not know how they get there. In the fourteenth century Jean de Muris, a great theorist, gives vent to his artistic wrath: "How can men have the face to sing discant who know nothing of the combination of sounds! Their voices roam around the *cantus firmus* without regard to any rule; they throw their tones out by luck, just as an unskillful thrower hurls a stone, hitting the mark once in a hundred casts. They are like a blind man trying to strike a dog."

Even the irreverent embroidering of churchly chants with secular, even coarse, popular songs (so that while one singer sang holy chants another sang some bacchic,

roystering, taproom ditty), had its use, for it prepared the way for the polyphonic church music, the germs of which were already found in the eleventh century. The people's melodies were vitalizing church music.

(*e*) *The Development of Counterpoint.* But with all these ear-rending abuses and irreverences, the use of the discant became ever more intelligent and effective. Presently, this discordant, extemporized discant was changed and adapted to the *cantus firmus,* so as to make it more harmonious. Then when the individual notes of the several parts were brought into relation with each other, note against note, point against point, and time values were recognized, it was called counterpoint. The irresponsible, extemporized discant of the troubadours became more ordered and subject to rule.

While the fundamental melody, or *cantus firmus,* was still borrowed from established chants or current secular songs, the other parts were kept in the same style and more and more were based upon it in melodic progress. Presently the several parts did not begin at the same time, introducing a climacteric effect. Then the secondary parts began to imitate the series of intervals of the first part, which was called imitation. This inevitably developed figuration, or the use of phrases or groups of notes having a definite melodic value.

Later still the melody was so constructed that it could be taken up by the other parts one by one and still be harmonious, which was called a canon. This finally in later times developed into the elaborate fugue which reached its climax in the work of J. Sebastian Bach. In counterpoint the composer has two or more melodies sounding at the same time. The several parts are independent of each other except that they must be measurably concordant or harmonious. This is merely incidental

to the movement of the melodies which are the supreme consideration.

In harmony there is a melody in one of the parts while the other parts are so written that they are merely a harmonious accompaniment to strengthen or embellish the melody.

It is important to distinguish these fundamental terms. *Organum* was singing fifths and fourths under the melody. *Organum profanum* was using also thirds and sixths. *Discant* was the singing of other melodies as an accompaniment to the main melody, or *cantus firmus. Counterpoint* was a discant where the other melodies coincided in time with the cantus firmus point by point, *i. e.,* note by note.

(*f*) *The Development of the Prose and the Sequence.* The sequence was originally a melody without words, sung to the concluding syllable, a, of "Alleluia." Later it was attached to the Gradual of the mass. In the ninth century words were adapted to this melody and it was called a Prose, being without meter. These Proses were given a metrical form and became hymns following the Gradual and Alleluia owing to which they were called Sequences.

From the twelfth to the fifteenth centuries these were very popular and some of the most poetical and spiritual talent of the Church found a voice in them. However, at the Council of Trent all but five of them were officially eliminated from the liturgy. Some of our most valued translations of mediæval hymns come from this source and their melodies are found in Anglican hymnals.

(*g*) *The Further Progress of Polyphony.* The chronology of this period is very difficult to fix, partly because progress was not made at an equal pace in all parts of the Western Church, partly because of the varying abilities

and progressiveness of the leading musicians of different localities, partly because of the lack of needful data. In general the period of experimentation in polyphonic music lasted from 1000 to 1350. It was a time of wildest confusion. Staffs of from two to thirteen lines, all sorts of clefs, diaphony, discant, counterpoint, all at the same time.

The rules of counterpoint had been more and more definitely formulated from 1200 on. Consecutive fifths had been eliminated; unresolved discords had disappeared and satisfying resolutions invented; thirds and sixths were freely used; the value of oblique and contrary motion had been recognized and exploited. Music became a mathematical science; compositions were the result of calculation, mechanical and rigid, not of inspiration under the guidance of the ear.

Rules based on theological subtleties, purely academical and artificial restrictions, symbolisms of all kinds, ingenious combinations of mere notation, the solution of merely technical problems, made up the body of these polyphonies. Single and double counterpoint, elaborated into direct, inverted, retrograde, augmented and diminished, was elaborated for the eye rather than for the ear.

The compositions were valued for their elaborateness and intricacy, not for their musical effects. They were theoretical examples and not practical compositions intended to be sung. Monks sat in their cells, far from the world and studied the rules and juggled with black dots on ruled white paper.[6]

[6] "The monks . . . were not only the conservators of classical philosophy and literature . . . but were also poets, architects, painters, sculptors, and musicians, the originators of theories and technicalities connected with all arts. The cloister was in itself a substitute for university, library, art academy,

It was a dead, useless, mechanical product, of course, but very valuable as apprentice work, as academical exercises that should train the coming composer and give him a full command of all possible musical resources.[5]

This polyphonic development was almost entirely an outgrowth of musical initiative in northern France and the Netherlands. In the same region and during the same period the Gothic architecture was originated. It is easy to see the common elements expressed in them,—the expression of individuality, the multiplicity of details, and the organizing instinct for their perfect correlation in a unified whole.

In actual use there was a persistence of the musical Gregorian chants with such simple use of diaphony and discant as was practical. Doubtless there was recourse to some of the more sedate and solemn folk-songs where choirs of the clergy were not available. It is worthy of note that while church music was becoming more and more artificial and mechanical, folk-song was rising to the peak of its attractiveness and popularity.

and museum. . . . But above all it should not be forgotten that the elevation of music into a self-existing art is almost entirely owing to the zealous earnestness of the monks."—Naumann, "History of Music."

[5] "Composers found out artistic devices which facilitated their labours, and enabled them to approximate to more pleasing and artistic results. But the average quality of their works of every kind is marvellously crude, harsh, and incoherent. Almost every elementary rule of art which a modern musician holds inviolable is broken incessantly, and there are hardly any pieces of music, by the most learned or the most intelligent musicians up to the fourteenth century, which are not too rough and uncouth to be listened to by even the most liberal minded and intelligent musician without such bewilderment as often ends in irrepressible laughter."—C. Hubert H. Parry, "The Evolution of the Art of Music."

2. The Growth of Artistic Purpose

(*a*) *The Artistic Use of Acquired Technical Skill.* As the fifteenth century approached this great contrapuntal competition began to subside. All possible elaborations and intricacies having been exhausted, composers began to think of using the tools that had been so industriously forged for practical and even artistic ends. The melodies lost their arbitrary, inexpressive angularity and became smooth and pleasing. The harmonies became less discordant and harsh, gaining variety, suavity, and charm. The construction was simplified and the awkward use of merely technical procedure eliminated. They began to set current lyrics in polyphonic style, but with more pleasing melodies, simpler construction and less intricate and more singable counterpoint. The church music became more smooth and flowing, more melodic and more expressive.

(*b*) *The Abuse of the Artistic Impulse.* This tendency was again overdone and we hear of secular melodies used as the *cantus firmus* in masses, so that we find the Mass of "The Armed Man" or Mass, "Adieu, My Love," or Mass "Friend Bandichon." This was not done with any thought of irreverence, just as in our day the use of "Old Black Joe" with a religious text gives no offense to many very religious people.

Worse than this borrowing of airs from secular sources upon which to build masses was the introduction of elaborate cadenzas and other secular ornaments in bad taste and worse irreligiousness. So while secular music had given religious composition a new impulse and had broken down the rigidity of the technical polyphony, it had also served to endanger its liturgical and religious value.

(*c*) *Music Affected by General Irreligiousness.* This

danger was all the greater because of the loss of the primitive faith and devotion of the leading political and intellectual classes because of the Renaissance. The body of the Church was still devout and strong in faith, but the leaders were corrupt in morals, bankrupt in faith, devoted to worldly ideals in art and literature. The protest of Huss had ended in a martyr's fire, but the later denunciations of Luther had political power back of them and led to the awakening of the Church at large to the need of a Counter-Reformation which included music as well.

(*d*) *The Reforms Led by Palestrina.* Just as the Catholic Church had still a large body of devout people, lay and clerical who were spiritual and devout, so there were still composers and musical authorities who cultivated noble ideals of church music. Pierluigi Palestrina (1524–1594[6]), is often lauded as the St. George who went out single-handed to destroy the dragon of a secularized church music; but he was not alone. He had the advantage of being at the ecclesiastical and musical center and so received a recognition for his good work denied to others less fortunately placed who cultivated the same ideals and produced musical compositions little if any less valuable than his.

Goudimel (1549–1572), a Frenchman, had been the teacher of Palestrina and formed his ideals as well as trained him in counterpoint. He it was who set the Genevan psalm tunes in plain four part counterpoint, placing the melody in the tenor as was the custom in the

[6] Palestrina was born in 1525 or 1526 at Palestrina in the Campagna of Rome. At an early age he went to Rome for musical study. He is reputed to have been a scholar of the Fleming, Goudimel. Certain it is that he was a disciple of the Flemish school of composers and at first he indulged in their vagaries but later developed a profoundly religious as well as artistic style.

polyphonic music of that era. He was suspected of Protestant sympathies and perished in the massacre of St. Bartholomew's night.

Josquin des Pres, Willaert of St. Mark's, Venice, Orlandus Lassus, Arcadelt, were other Netherlanders who cultivated a high standard. Andrea and Giovanni Gabrielli, and Croce in Venice, the Anerios and Naninis of Rome, and Tallis in England did wonderful work worthy of Palestrina himself.

If Palestrina had any musical advantages over these composers, it was in the greater Italian instinct for sweetness and charm of melody. In every other respect he was the pupil of the Netherlanders through Goudimel. There was no change of methods, no sudden transformation of style. He, with the others mentioned, simply reached the consummate flower of the mediæval polyphonic style of chorus music.

His Mass of Pope Marcellus is a noble example of the mediæval church music at its best. The stories that have gathered about it are myths. He wrote other masses equally good, but none better and some less worthy. Instead of creating a great musical epoch, he, with Allegri, Cavalini, and a few others, closed the mediæval period in a noble and worthy way.

3. General Characteristics of Mediæval Church Music

It may be well to fix in our minds the definite characteristics of this mediæval church music in order to differentiate it from the music of the present day.

(*a*) It was chorus music. There were no solos, or concerted numbers, as in modern music. The emphasis placed on an individual melody, or the striking introduction of a single singer, would have been felt as a dis-

traction, an intrusion upon the worshipful attitude of the hearer.

(*b*) The music was purely vocal. There was no instrumental accompaniment of any kind. As the organ was developed it was occasionally used to give or support the pitch by sounding a few notes at long intervals. But otherwise, despite the multiplicity of instruments used in private life and on secular occasions and festivals, and the affluence of instrumental music for such use, the Church did not allow their use, feeling it would disturb the serenity and spirituality of its liturgy.

(*c*) While these mediæval choruses had harmony, inasmuch as the several parts must be more or less in concord, it was merely accidental and not an organic part of it. Melody in every part whether there were two or twelve, was the fundamental conception.

(*d*) This mediæval music was practically still on the old modal or hexachord basis. There were no modulations into relative keys, for there were no other keys. A flat was used occasionally—in the hexachord of F—but there were no other accidentals in a harmonic sense. In other words, with the rather rare exception of a B♭, only the tones represented by the white keys of an organ or piano were used.

(*e*) There was little or no organization of the melody into phrases or periods, no seeking after symmetry, no balancing of one passage against another, no architectonic building up of the several parts. Each of the melodies in the several parts was continuous, with no joints. This is particularly true of the severe or intricate style. In the simple or familiar style there was more articulation, suggested no doubt by the metrical form of the secular lyrics.

(*f*) While the *cantus firmus* was the leading melody, usually assigned to the tenor, the other parts were con-

ceived of, not as a harmonic accompaniment to a leading solo, but as independent melodies. In the music of Palestrina's age, the *cantus firmus* falls away and all the parts have equal value.

4. The Effect of Mediæval Church Music on Modern Nerves

If one has not heard music of this kind, it will be difficult to imagine its effect. With no variation from chorus to solo voices, with no instruments of varying timbre to stir up the nerves, with no orderly progress of the consonances and dissonances, with no chromatic intervals or changes of key, with no points of rest temporary or complete, with no one definite melody on which to concentrate the attention, one would expect a depressing monotony.

But at the very first the incessant movement of the parts in continuous melody, the unexpected chord relations and effects, intrigue one's interest. There is a delightful serenity, a very spirituality, in the quiet flow of the ever-changing melodies as they rise and fall with an even force whose variations are slight as compared with the climacteric variations in a modern composition. One feels that this is true worshipful music that lifts the soul into the upper serenities without any appeal to human desire or dramatic instinct.

But presently the attention begins to wander and a greater effort is needed to follow the lines of imitation between the parts. Then one falls into a passive state of mind where one is conscious only of a vague nervous impression.

Then the monotony of the effect begins to be painful and you long for a restful cadence or a climax, until you have a sense of a drop of water falling on some single spot and you distressfully long for it to cease. Of course,

much will depend on the nervous system of the hearer, whether it be dull or sensitive, whether it has been trained to adapt itself to unusual combinations of sound. The average musical hearer will suffer after his first interest begins to flag, because his nerves are not accustomed to the unbroken monotony and because he cannot think musically in the mediæval idiom. Its logic differs entirely from that of modern music.

REVIEW QUESTIONS

1. Where did the first signs of musical progress appear?
2. What was the meaning of "organum"? "organum profanum"? "diaphony"?
3. What important lines of progress were due to Guido Arentino?
4. What was the hexachord? What was mutation? What was solmization?
5. Give the story of Guido's experience.
6. What was the state of popular music during the Middle Ages?
7. What influence did it exert on church music?
8. Who were the Troubadours, the Minnesingers, the Meistersingers?
9. What was the discant?
10. What share had harmony in its development?
11. Was discant singing concordant?
12. What is counterpoint?
13. Give the musical character of the period from 1000 A. D. to 1350 A. D.
14. What was the value of this contrapuntal work?
15. What was the Church at large doing musically during this period?
16. What change appeared during the latter half of the fourteenth century?
17. What musical abuses set in and what was their cause?
18. Who was Palestrina? In what work was he a leader?
19. What other composers shared in the work of reform?
20. In what particular did Palestrina's music excel?
21. What six characteristics did this mediæval music display?
22. Describe the impression made by this music.

XIX

THE MUSIC OF THE REFORMATION

Class Room Suggestions: If at all possible, have some of the leading German chorals mentioned in the text played on the organ or piano, quite preferably the organ. If time allows, connect up this chapter with the church and secular history of this period. Call special attention to the tunes still in use borrowed from the German.

Supplementary Reading: Dickinson, "Music in the Western Church," Scribner's Sons, New York; Naumann, "History of Music," Cassell, London; Grove, "Dictionary of Music and Musicians," Art. "Chorale" and "Luther," Presser, Philadelphia; Sittard, "Compendium der Geschichte der Kirchenmusik," Levy and Müller, Stuttgart, Germany; Cunz, "Geschichte des deutschen Kirchen-Liedes," Loeschke, Leipzig.

It is noteworthy that at the very time that Palestrina and his contemporaries were bringing the mediæval polyphonic chorus to a high point of perfection in both religious and artistic value, an entirely new force in church music should have appeared in the North. The mechanical counterpoint had been developed to a large degree in the Netherlands and in northern France as the outgrowth of the schools of music founded by Charlemagne. The humanizing touch under the influence of folk-song had come from the same region through the Northerners, Goudimel and Lassus at Rome and Willaert in Venice.

1. Pre-Reformation Vernacular Hymns

There is abundant evidence of the growth of popular vernacular religious song from the eleventh century on. The enthusiasm generated by the Crusades, the new intellectual activities of the twelfth and thirteenth centuries could not but find a repercussion in the religious life and popular music of the people. The chivalrous attitude of the age led to intenser loyalty to the Virgin Mary and

innumerable songs were written in devotion to her.[1] There were hymns written in honour of popular saints. There were songs for festivals and processions.

Tauler, Eckhart and other mystics wrote hymns of a more spiritual order, expressing desire for conscious communion with God, more subjective and individual than those in general use. In the convents there were almost erotic hymns contemplating the perfections of the Divine Bridegroom. There was abundant religious life in the body of the Church that craved this extra-liturgical expression.

Indeed, this tide of religious life rose higher and higher among the laity, the inferior clergy, and the more obscure monastic institutions, manifesting itself in such fanatics as the Flagellants; in minor heresies and in local efforts at reform. This growing religious vigour finally culminated in the Reformation, and in the Counter-Reformation in the Catholic Church.[2]

(*a*) *Participation in Musical Service Forbidden in Germany.* In Germany from the beginning of the Christian Church under Gallus in the seventh century and later under Bonifacius in the eighth century, the music of the service was in Latin and was sung only by the clergy. The response, "Kyrie eleison" or "Kyrie eleis," was for

[1] This had gone so far that the Psalms, and other passages of Scripture, had been rewritten to refer to the Virgin and issued as the "Psalter of Mary."

[2] "There is an enormous quantity of genuine early German folk-music; but it is quite singularly deficient in vividness of any kind, and is devoid of marked characteristics in the way of eccentric intervals and striking rhythms. The designs themselves are on an average of a higher order and represent stronger instincts for organization than the tunes of other nations which in actual details of material are more attractive."—C. Hubert H. Parry in "The Evolution of the Art of Music."

centuries the only participation in the musical service allowed the laity.

The Capitularian of Charlemagne and Louis the Pious forbade their congregating at the crossways or streets to engage in worldly gossip or the singing of secular songs. If they desired to sing they should confine themselves to the "*Kyrie*" which they often did hundreds of times in succession.

(*b*) *The Beginning of the Vernacular Hymn.* But this satisfied neither the musical nor the devout impulses of the people. Vernacular hymns began to be written and sung in the eleventh century, although none have survived. At the anointing of King Conrad in 1024 it is said, "Joyfully they marched, the clergy singing in Latin, the people in German, each after its own fashion."

Following as they did the Kyrie sung by the people it was natural that the sequences should be translated into the common speech, and hence we find them coming into use. The Germans were much more given to this practice than other nations, as we see from many incidental allusions in letters and books of the period.

By the time the twelfth century appeared the religious folk-song had been fully developed out of the "Kyrie eleison," which was commonly used as a refrain and which was the basis of the word for song in all European languages, surviving in our word "lay."

Quite a number of both hymns and melodies of the thirteenth century have come down to us. The political unrest, the prevalence of pestilence, the worldliness of the priesthood, all united to make the fourteenth century less prolific in German religious songs; but some interesting and admirable examples remain.

(*c*) *The High Tide of Vernacular Hymnology.* The tide of vernacular song rose again in the fifteenth century

and the treasury of Pre-Reformation religious hymns was greatly enriched. The people participated less and less in the Latin hymns. German hymns were used in the regular church services. The clergy sang in Latin and the laity replied in German. This recognition by the ecclesiastical authorities which was absolutely essential to hold the people and to serve their spiritual interests on the one hand, and the rapid adoption of the art of Gutenberg, on the other, led to a rapid development and improvement of the people's religious song. Their use was encouraged, not only on extra-liturgical occasions, such as processions, christenings and the like, but in the stated service itself.

(*d*) *Source of Tunes.* Part of the melodies were arranged from the churchly sequences, but more were borrowed from prevalent secular songs. In 1527 there appeared at Nuremburg "Evangelisch Mess Teutsch" (Evangelical German Mass) to whose hymns popular melodies were to be sung: "Rosina, where is thy form?" "There comes a summer freshness" and the like. In 1540 appeared in Antwerp a collection of spiritual songs with 152 folk melodies.

About the same time Marot issued his metrical paraphrases of the Psalms set to hunting and dancing tunes. In 1571 appeared "Gassenhauer, Reuter und Bergliedlein, christlich, moraliter, und sittlich verändert" (Street, Riding and Mountain Songs, altered in a Christian, moral and decent way) at Frankfort a. M. in Germany. From this it may be seen how prevalent was the fashion of transferring secular tunes to sacred uses. This was the easier, as the German folk-songs are dignified and heavy, as compared with the light frivolousness of those of other nations.

On the other hand, these tunes borrowed from the

sequences, as well as the folk-songs, that were used, were not syllabic, but were varied in rhythm, indulging not only in triple time, but even in syncopation. It was not until the latter part of the seventeenth century that the tunes were transformed into the more stately syllabified form.

(*e*) *Vernacular Hymns in Bohemia.* This general uprising of religious spirit and its efforts at self-purgation were naturally reflected in the popular religious song. Under the leadership of Huss there was a demand for the use of the people's language in worship. He wrote hymns in Czech as well as Latin and urged the use of these popular religious songs.

There was a Czech hymn-book published in 1501, and another by the "Unitas Fratrum" in 1505 containing no less than four hundred hymns. These hymns were sung to tunes from various sources, churchly and secular. Their influence in Germany must have been considerable, hastening the rise of the German hymnology.

(*f*) *Musical Resources Ready for the Reformation.* Even more than other peoples, the Germans had always been a song-loving people. As we have seen, before the Reformation they had a wealth of religious folk-songs in the vernacular. These were melodic and simple in structure. While the people had a very slight share in the music of the liturgy, they sang their pious folk-songs at festivals and processions and in their daily life. In consequence Luther and his associates had immense musical resources at their command when their propaganda in behalf of the Reformation began.

The tunes were ready at hand and were known to the people. The hymns could be purged of their mariolatry and hagiolatry and given a more definitely evangelical content. Obeying the widely popular demand, they took

the radical step of introducing them into public worship and the music of the Reformation was in full operation. This accounts for the rapid spread of the new faith.

Just as in the third and fourth centuries the Arians had propagated their heresies by means of popular hymns sung to well-known tunes, so Luther by the use of this music won the people. There was all the more enthusiasm, because a song-loving people was permitted fully to share in the music of the public service and in their own tongue.

2. The New Hymnology of the German Reformation

While this great ready to hand body of song was the secret of the popular success of the Reformation, the new faith, with its almost fanatical enthusiasm, the new initiative, rending the shackles of prescribed routine, the new, fresh vision of divine truth, urged the seeking of entirely new expression in hymns and melodies.

(*a*) *Luther's Helpers.* One of Luther's most valuable helpers on the popular side of the reformer's musical effort was Johann Walther (1496–1570), who issued a hymn-book with music in 1524 containing thirty-eight German and five Latin hymns set in three, four and five parts. His chief contribution was the clarifying of church melodies by giving them the form of the current folk-songs and so making them practical for the singing of the people. He has been termed the co-founder with Luther of the evangelical church hymn, for he supplied the musical skill and training wanting in Luther.

Another valuable helper, on the choral side, however, was Ludwig Senfl (1480–1555), whose motets broke the path for the polyphonal motets and cantatas of J. Sebastian Bach. They were great favourites with Luther, as

were also his contrapuntal and polyphonal settings of German hymns. These two composers represented the two sides of subsequent German church music.

(*b*) *Luther's Own Contribution.*

(1) Luther himself wrote thirty-six new hymns which furnished the models in substance and style for a host of other hymn writers, so that by the time of his death no less than sixty collections, including enlarged editions, had been issued. Koch gives the name of fifty-one writers who contributed to the new German hymnody between 1517 and 1560.

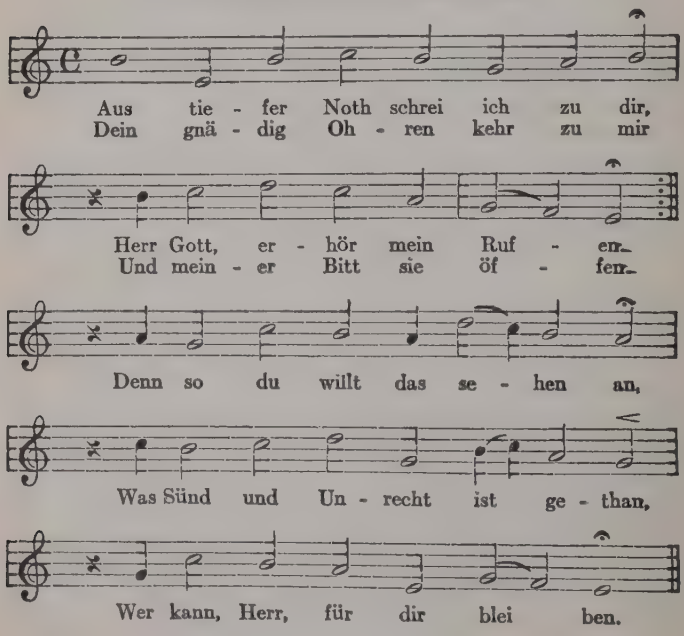
Some of his hymns were free versions of favourite psalms; others were expressions of personal experience. He had a strong, direct, almost homely style that appealed to the German people.

(2) For some of his hymns, he supplied music, notably "Ein Feste Burg ist unser Gott" and "Gelobet seist du, Jesus Christ." While he was no professional musician, he had the creative urge which showed itself in many directions, and would be quite sure to manifest itself in a line where he had so much need as well as interest. The effort to find original sources for all the tunes alleged to be his is commendable in itself, but one must take the results of the investigation with a proper discount for the ever-present vice in German scholarship of exaggerating microscopic coincidences into bases for large generalizations. To find a few successive notes in an ancient Gregorian melody slightly resembling a slight phrase in the tune to Luther's "Ein feste Burg," as did Bäumler, does not to the slightest degree invalidate Luther's standing as its composer.[3] Moreover as he supplied only the tunes, no professional training was needed, for the great mass of folk-songs are composed by non-professional persons.

[3] See Naumann's "History of Music," Vol. I, pp. 460–469.

(*c*) *Transitional Character of Luther's Tunes.* Looking over the melodies ascribed to Luther, one is struck with the fact that his sense of tonality had not been fully developed. In one case the melody is clearly in the key of C, but in the last strain it passes into the key of G and leaves the tune there! Another, ostensibly in the key of C, begins on B, is vaguely in the key of A minor during the first strain, then vaguely in C, then again vaguely in A minor, then modulates into G and closes in C.[4] Another begins and ends on B, although it moves principally in the tonality of A minor. Another is conceived in the Dorian mode, beginning on A and ending on D. Traces of the sequences with their many notes on one syllable

[4] The One Hundred and Thirtieth Psalm.



are found in his setting of the Apostles' Creed. Others again, like his well-known "Ein feste Burg ist unser Gott," are very clear in their tonality.

These tunes of Luther in their original form lack mensural notation, lacking the bars, although whole notes, half notes and quarter notes are used.

Aside from a few in the key of G, which calls for F♯, all these tunes are practically confined to the white keys of the organ.

Taken as a whole they give evidence that in churchly circles the transition from mediæval modes to modern tonality had by no means been fully made. We know that the standardization of notation was in a particularly backward state in Germany at this time.

(*d*) *Harmonization of Tunes Simplified.* While choral counterpoint led to elaboration, the limitations of popular participation made for simplicity and strength. The growing vogue of the simple or familiar style among the northern composers brought a plain harmonization, note for note, chord by chord, for these popular hymn tunes.

(*e*) *Luther's Breadth of Mind and Taste.* His broad sanity left little place for the narrow fanaticism of Zwingli, the Swiss Reformer, under whose leadership not only the organ and other instruments were shut out from the churches, but congregational song itself was forbidden. For this reason the polyphonic music was not entirely cast aside by Luther. He was an admirer of much of it. He did not insist on vernacular hymns only, but allowed and argued for the occasional use of the Latin. Hence the two tendencies in German church music were developing side by side: (1) the polyphonic choral music which found its culmination both vocally and instrumentally in the compositions of J. Sebastian Bach and (2) the people's hymn tune which found its first expres-

sion in the chorale, or hymn tune, and later in the pietistic folk-song.

3. The Place of Music Under Zwingli and Calvin

While Luther, despite his strong reaction against the errors and vices of the Romish Church, was careful to retain all that was good in the Catholic service and in its music, as was also the case with the English reformers under Henry the Eighth and his successors, Zwingli and Calvin took an extreme position in opposition to all that was Romish in doctrine and worship.

(*a*) *Zwingli's Opposition to Church Music.* Zwingli and his associates in particular went to extremes in their hatred of Roman doctrines and customs. Fortunate in their opposition to the doctrine of Transubstantiation as held by the Roman Catholic Church and to the compromise Lutheran doctrine of Consubstantiation, they were not so well advised in their rejection of all church song, for in this they flouted the example of their Lord in closing the newly instituted rite of the Eucharist.[5] Nearly a century elapsed before church music entirely recovered its place in the Reformed Churches of Eastern Switzerland.

(*b*) *Calvin's Attitude Towards Church Music.* Calvin took a much less extreme attitude, but by no means imitated Luther's devotion to church music. He shut out the choral part of the church service entirely. He provided for congregational singing in unison only, but confined it to metrical versions of the psalms and canticles.

[5] When Zwingli appeared before the City Council of the city of Zürich to urge the abolition of church song, he sang his plea. When objection was raised to his method of presentation, he replied, "If you find my presentation of the case absurd, why should any one insist on approaching the great God after the same absurd fashion?" Need it be said that they accepted his views and the voice of song was silent in Zürich until 1598.

He went back to the position of the early Church and shut out instrumental music and accompaniment entirely. This radical attitude was to have an unfortunate tendency in the Reformed churches. Thus the musical part of the Reformed service was exceedingly limited and gave little opportunity for development.

(*c*) *The Genevan Psalter and Tunes.* Calvin had gathered some tunes in Strassburg, possibly some of the French tunes associated with Marot's psalms; it is also fairly certain that some were of German origin. Beginning with a nucleus of the Marot psalms in 1839 and 1842 the Genevan Psalter gradually developed from that time until 1562 under the literary labours of Marot and Beza and the musical editorship of Louis Bourgeois. The latter simply gathered up melodies from various sources, from Gregorian and from German and French folk-songs, probably in some cases combining phrases from several current melodies. Bourgeois was a collator, not a composer of melodies. There was no thought of originality or pride of composership. The ascription of "Old Hundredth" to Bourgeois has therefore no actual basis. It may be Gregorian in origin, but more probably had its rise among the people of France.

There were 125 tunes in the Psalter of 1562. There were many changes in several editions between 1542 and 1562. Tunes had been tried out and dropped; others had been changed; a few were wedded to other psalms than those with which they had first appeared. But after 1562 there were no more changes. It became a fixed and unchangeable collection, a sacrosanct institution that might not be touched. The attitude of the Egyptian priests towards their music was duplicated in the liturgy haters of Geneva.

(*d*) *The Harmonization of the Genevan Psalter.*

Goudimel, the teacher of Palestrina, and his forerunner in the simple style of counterpoint, issued a harmonization of psalm tunes for the churches of the Reformed faith, including England. As was customary at that time, the melody appeared in the tenor, but presently it was transferred to the discant, or soprano, as more prominent and accessible to the common people. Calvin did not allow this four-part harmony to be sung in public service. The melody was still sung in unison.

4. Subsequent Development of the German Chorale

We have seen that the further development of the Genevan tunes was checked and found further development in Great Britain. This was by no means true of the German chorale as originated by Luther and Walther.

(*a*) *Transfer of Melody to the Discant.* While Walther had given folk-tone to the melodies to be sung by the people, he had still kept them in the tenor, as had been the custom. This made it difficult for the people to sing the tune as it was more or less submerged by the higher discant of the choir and by the organ accompaniment. It was Lucas Osiander (1534–1604) who gave the initial impulse to the transfer of the people's melody to the discant, or soprano in his "Geistliche Lieder und Psalmen" (1586). The harmony was simplified and popularized. Others followed the new tendency, notably the two Prætorius' and others of Hamburg, Hans Leo Hassler of Nürnberg, Johann Eccard of Berlin.

(*b*) *Arrangers Become Composers.* About this time, the beginning of the seventeenth century, harmonizers of accepted existent melodies began to be actual composers, originating their own tunes. Instead of confining themselves to the diatonic scale in C, chromatic tones were

utilized to produce richer harmony and to vary them by modulation to other keys.

Among those who developed this more modern style, and some of whose work is still used in Germany, Great Britain and America are Johann Crüger (1598–1662) of Berlin, and Johann Rudolph Ahle (1625–1673) of Erfurt and Mühlhausen, tunes by both of whom are still sung in our churches.

It is worthy of note that while J. Sebastian Bach reharmonized and arranged many of these chorales for his cantatas, despite his fertility, he furnished no chorale of his own composition for the use of the Christian Church.

(*c*) *Syllabizing the Chorales.* Towards the end of the seventeenth century, owing to the reaction produced by the introduction of operatic melodies in dance rhythms as church melodies, arrangements began to appear in which the folk-song rhythms, which had been perpetuated till then, were excluded and the melodies were syllabized, *i. e.*, the notes were made of equal length and triple time no longer used.[6] This had already been done in the tunes used by the Reformed churches in England.

(*d*) *The End of the Chorale Epoch.* While here and there during the next two centuries a chorale has been composed that found wide use, the interest in their composition subsided. There seemed slight impulse to add to the great wealth of German hymn tunes already provided.

(*e*) *German Tunes Still in Use.* The vitality of these German chorales and hymn tunes and their wide use in other countries is quite remarkable. It is worthy of re-

[6] The rhythmical movement of the Chorales was eliminated first by Wolfgang Carl Briegel in 1687 in his "Darmstädter Gesang und Choral Buch" from which both British and American hymnal editors have borrowed largely.

mark that such heavy chorales as Nicolai's "Wie schoen leuchtet der Morgenstern" and "Wachet auf, ruft uns die Stimme" and even "Ein feste Burg," the most constantly used in Germany, have found little actual acceptability and use in other countries. They were too peculiarly German in their slowness and weight. But scores and scores of the less heavy tunes are in evidence in British and American hymnals. No less than 104 are used in the Scottish Psalters. "Hymns Ancient and Modern" has 92. The revised edition of the Presbyterian "Hymnal" has 82. The Canadian Episcopal "New Hymnal" has 82. "The Methodist Hymnal" has 63. Even the United Brethren "Sanctuary Hymnal" has 54.

Among the more widely used, found in most of our hymnals, are the following:

Angelus	by Georg Josephi.
Austria	by Franz Joseph Haydn.
All Saints	originally appearing in the Darmstädter Gesangbuch.
Bremen	by Melchior Vulpius.
Breslau	in Psalmodia Sacra.
Dix	by Conrad Kocher.
Ein feste Burg	by Martin Luther.
Ellacombe	in Conrad Kocher's Zionsharfe.
Franconia	in Johann Müller's Choralbuch.
Greenland	by Johann Michael Haydn.
Hursley	by Peter Ritter.
Lyons	by J. Michael Haydn.
Mendelssohn	by Felix Mendelssohn-Bartholdi.
Munich	originally appearing in the Würtemberger Gesangbuch.
Nun Danket alle Gott	by Johann Crüger.
Passions-Chorale	by H. L. Hassler.
Spohr	by Louis Spohr.
St. Theodulph	by Melchior Teschner.
Swabia	in Johann Crüger's Praxis Pietatis.

This list does not include the arrangements from the German by Lowell Mason.

(*d*) *The Pietistic Folk-song.* But the piety of the German people was not fully expressed by these stately church tunes and a religious folk-song, somewhat akin to our Gospel songs, quietly developed among the German people. While these songs lack the majesty of most of the chorales, they have a devoutness all their own.

They are largely the product of the Pietistic movement and express its character. Such are: "Ich will streben nach dem Leben," "Lobt den Herrn" by E. H. Rolle, "Ich bete an die Macht der Liebe" by Bortniansky, "Wie wird uns sein," "Sei getreu bis in den Tod" (both from the "Brüggener Lieder"), "Der beste Freund ist in dem Himmel" by Louisa Reichardt, "Hier ist mein Herz" by D. Rappard, "Lasst mich geh'n" by K. Voigtländer, "So nimm denn meine Hände" by Franz Silcher and many others, all of which are sung and cherished in devout German households generation after generation. Many of the German arrangements of Lowell Mason were taken from these simpler hymn tunes.

In the last three decades, owing to the introduction of American gospel songs, by Nonconformist church bodies, a new impulse has been given to the composition of this pietistic folk-song. It has, however, a stronger artistic tendency than either the old religious folk-songs or the American importations.

REVIEW QUESTIONS

1. While Palestrina and associates perfected polyphonic music in the South, what happened in the North?
2. What activities were there in vernacular hymns?
3. What was the relation of the German people to the music of the church service?

4. What relation had the sequences to these vernacular hymns?

5. During what century was the high tide of vernacular song and why did ecclesiastical authorities encourage it?

6. Whence did the tunes to these hymns come?

7. When did these hymn tunes take on a syllabified form?

8. Who led in the creation of a Czech hymnology?

9. What musical resources were available at the beginning of the Reformation?

10. Who were Luther's musical helpers and what two tendencies did they represent?

11. What were Luther's contributions in hymns and tunes?

12. What stage of musical development did Luther's tunes represent?

13. What marked manifestations of breadth of taste and sanity of judgment did Luther display?

14. What was Zwingli's attitude towards religious music?

15. In how far did Calvin differ from him?

16. Relate the steps in the development of the Genevan Psalter as regards psalm tunes.

17. Who harmonized the Genevan Psalter? In what style, and for what purpose?

18. What successive steps were taken in the development of the German chorale?

19. Why have the most notable German chorales found little use outside of Germany?

20. What is the German contribution to the hymnals issued in Great Britain and America?

21. What is the character of the Pietistic Folk-song?

XX

THE ENGLISH PSALM TUNE

Class Room Suggestions: Some of these early psalm tunes very likely appear in the hymnal in use. Have them sung and followed by a typical German chorale in order to give an idea of their difference. Call attention to the surviving tunes as listed and actualize their age and varied history to the student's imagination.

Supplementary Reading: Ritter, "Music in England," Chapters 1, 3, 4, and 10, Scribner's Sons, N. Y.; Benson, "The English Hymn," Doran, N. Y.; Grove, "Dictionary of Music and Musicians," Art. "Psalmody" and "Psalter," Presser, Phila.; Breed, "The History and Use of Hymns and Hymn Tunes," Revell, N. Y.; Curwen, "Studies in Worship Music," Curwen, London; Dickinson, "Music in the Western Church," Scribner's Sons, N. Y.; Barrett, "English Church Composers," Low, London; Helmore, "Plain Song," Novello, London.

1. The Earliest English Church Music

When Augustine and his monks entered Canterbury, they not only inaugurated the Roman sovereignty over the British Church and changed the tonsure of its priests, but substituted the Gregorian system of church music for the ruder music of the Britons. While this Roman music controlled the greater urban churches and the monasteries, it is doubtful if the village and rural churches and chapels used it to any considerable extent. It is certain that the people's secular and even religious songs retained their ascendency over the populace and that the ecclesiastical and the popular music developed side by side each in its own style, the latter affecting the former, rather than the reverse.[1] There are indications

[1] "I have been unable to trace a single instance of a popular air derived from such a source," *i. e.*, Church Plain Song.—Chappel, "Popular Music of the Olden Time."

that the Church for educational and propagandist purposes used the popular ballad tunes.[2]

Not only did the Church use the people's melodies for its own purposes outside of the church service, but they were adapted to the needs of the church service itself.[3]

We may assume that it was difficult to keep the Gregorian melodies pure from this outside influence. This was easier in the great monastic centers, and the chief blow the Gregorian system received was when Henry VIII suppressed the monastic foundations and sequestrated their immense estates; the next was when its manuscripts were destroyed during the ascendency of the Puritans.

As we have seen, this Plain Song, as the Gregorian melodies have been called, had no particular rhythm and but incidental form. It was not simply a chant, however, but had very considerable melodic variety. It had developed quite elaborate musical phrases sung to one syllable, called *melisma,* which demanded very considerable vocal skill, much greater than for the singing of the more tuneful popular ballads.

This secular body of folk-songs, and the undoubted religious folk-songs of the Lollards, or Wycliffites, found their opportunity under the political Reformation of Henry VIII. Influences from without coöperated very powerfully in the same lines of development.

[2] "Aldheim, the Saxon Bishop of Sherborne, in order to secure the attention of his rude neighbours, was wont to stand on a bridge, and to sing his religious instructions to them in the form of ballads."—Ritter, "Music in England."

[3] "William of Malmesbury tells us that when Thomas, the first Norman archbishop of Canterbury, who was very fond of music, and devoted much time to its study, heard any of the minstrels sing a tune which pleased him, he adopted it and formed it for the use of the church."—Ritter, "Music in England."

2. The Psalm Tunes

(*a*) *The Rise of Metrical Versions of the Psalms.* The influence of Marot's metrical versions of some of the psalms was immediately felt in England, where, even before they were actually published in France, Miles Coverdale, Bishop of Exeter, the translator of the Bible into the vernacular, issued thirteen psalms in metrical form. The leaflet was the beginning of English psalmody, although it had a very limited use.

There seem to have been Lollard versions preceding all these, but there is no absolute proof. Buchanan's version in Latin appealed to scholarly persons of every class, for Latin was still a living language among intellectual people; but his version did not get into actual use.

Thomas Sternhold, a groom of the chamber in the court of Henry VIII, translated some of the psalms for use in his private devotions about 1547, although we do not know the exact date of his first edition, containing nineteen psalms, which was issued at the suggestion of King Edward and dedicated to him. In 1549 an enlarged edition containing thirty-seven psalms appeared. In 1551 another edition was published in which the Rev. John Hopkins appears as a contributor. It was this edition which proved to be the foundation not only of the English Psalter, but of the Scottish as well. These psalms were used to some extent in worship. Burnet in his "History of the Reformation" says they "were much sung by all who loved the reformation and in many places used in churches."

In 1563 Sternhold and Hopkins issued the entire Book of Psalms adding versions of the Creed, the Lord's Prayer, the Ten Commandments, the Veni Creator and Te Deum. In it were included translations of ancient

hymns and even a few originals. The Genevan attitude of excluding hymns had evidently not reached England as yet. This complete edition was supplied "with apt notes to sing them withal," to quote the title page.

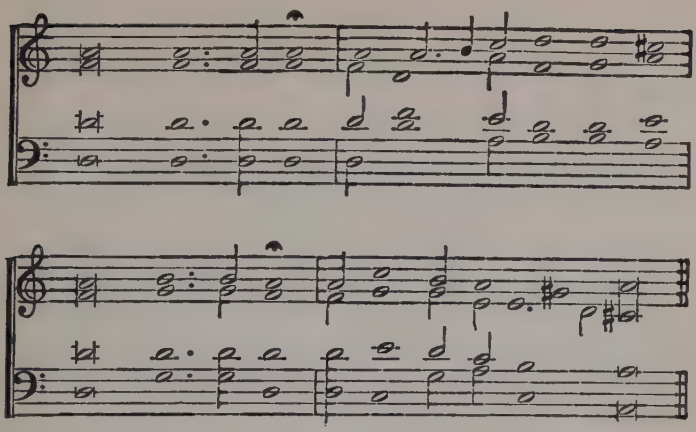
These metrical psalms were exceedingly popular in England, as they had been in France, until the ecclesiastical authorities had forbidden their use.

In England there was no such ban, a psalm in the vernacular being frequently sung after the sermon. Strype in his contemporary annals refers to the spread of psalm singing throughout England.[4]

(*b*) *The Psalter with Tunes.* The English and Scotch refugees, returning from Geneva after Bloody Mary's death in 1558, brought not only the narrow artistic attitude of that community, which banned all instruments from public worship and confined itself exclusively to the singing of psalms, but also the tunes to which the psalms had been sung in Geneva. Among others they introduced "Old Hundredth," and "St. Michael," which have survived to the present day.

In 1549 the whole Book of Psalms by Robert Cowley appeared. In his preface he refers to other previous translations which had passages "obscure and hard," which indicates that a number of psalters had appeared, probably Lollard. It was all in Common Meter, but the stanzas were in two lines with fourteen (eight plus six) syllables to the line. The following tune sufficed for the whole psalter:

[4] "As soon as they commenced singing in London, immediately not only the churches in the neighbourhood, but even the towns far distant began to vie with each other in the practice. You may now sometimes see at Paul's Cross, after the service, six thousand persons, young and old, of all sexes, singing together; this sadly annoys the mass priests, for they perceive that by this means the sacred discourse sinks more deeply into the minds of men."



This is the earliest music set to a metrical psalm as yet found. The melody is not in the treble, but in the tenor part. The bar in the middle gives it the form of the double chant which did not come into general use until a century later. It is in the seventh ecclesiastical mode, and it shows that the hymn tune as evolved on the continent had not yet come into use in England.

A number of editions of Sternhold and Hopkins with notes were issued.

Francys Seagar's Psalter, containing two tunes for nineteen psalms, somewhat in motet style (1553).

John Crispin's Psalter, of Geneva, containing fifty-one psalms each with its own tune (1556).

John Daye's Psalter, Sternhold and Hopkins, complete with sixty-five tunes of which thirty-eight were new (1562).

All of them were in the ecclesiastical modes. A separate edition about the same time supplied harmony in four parts. It contained 141 compositions, many of them settings of the same tune by different composers.

Among the harmonizers was Thomas Tallis, "The

Father of English Cathedral Music." He was royal chapel master under Henry VIII, Edward VI, Mary, and Elizabeth.

John Daye's Psalter (1567 or 1568), containing all the psalms as prepared by Archbishop Parker, with tunes by English composers including twelve by Tallis. For some unknown reason it was never actually published, although the version was superior to that of Sternhold and Hopkins, 1567 or 1568.

In this collection was the tune which in an abridged form we still use as "Tallis' Evening Hymn." In the same book appeared "Tallis" or "Ordinal" by the great composer, not so frequently used, but eulogized by Rev. W. H. Havergal, father of Frances Ridley Havergal, who said of it, "This is simplicity itself. A child may sing it, while manly genius will admire it."

In 1592 appeared Thomas Estes' psalter with fifty-seven tunes, forty-eight accepted church tunes and nine new ones, besides the "Spiritual Songs and Hymns." It was the first psalter to whose tunes names were given. In 1621 Thomas Ravenscroft issued his psalter, which is noteworthy because of two psalm tunes by John Milton.

There were quite a number of psalters issued by various composers after Estes and Ravenscroft, but none call for special mention until we reach that of Playford in 1671 and 1677, of which new editions were issued from time to time for a century. It was also notable because it was the basis of the New England Psalmody, being almost bodily reprinted by various compilers over the sea and finding wide use there.

Another psalm tune writer of considerable acceptability was William Tansur whose "The Royal Melody Compleat," issued in 1735, had wide use and was liberally reprinted in New England. His tunes showed the tend-

ency of the age in which he wrought towards smooth melodies and easy harmonies. He was a teacher of psalmody and studied practicability. His books contained the elements of music which were very useful on both sides of the sea.

Aaron Williams, whose "St. Thomas" is still a standard tune in our hymnals, lacked little of being as popular on both sides of the sea as Tansur. His "Universal Psalmodist" appeared in 1765. He too was a teacher of psalmody.[5] While representing a generation later than Tansur, he belonged to the same school and had the same current needs to supply.

(*c*) *Metrical Version of the Acts of the Apostles.* Another composer of this period was Dr. Christopher Tye, who wrote a metrical version of the Acts of the Apostles "with notes to eche chapter" and issued it in 1553. The work was left a torso, only fourteen chapters being published. Windsor, Winchester Old, and Dundee are supposed to be adaptations of tunes published in this work. That he was a musician of high standing is evident from the fact that in Rowley's play "Henry VIII," the following allusion is made:

> "England one God, one truth, one doctor hath
> For Musicke's art, and that is Doctor Tye,
> Admired for skill in musicke's harmony."

Anthony Wood declared that Tye restored church music after it had been almost ruined by the dissolution of the monasteries in the time of Henry VIII.

(*d*) *The Scottish Psalter.* The development of psalm-

[5] He also recommended the introduction of pipe organs "which are now very convenient to drown the hideous cries of the people."

ody in Scotland followed a course of its own. The nucleus of its Psalter was found in the "Order of Geneva," 1556, which contained forty-four of the psalms of Sternhold and Hopkins and seven new renderings by W. Whittingham. Forty-two of its tunes were also accepted.

In 1564 the complete Scottish Psalter was issued containing eighty-six psalms by Sternhold and Hopkins, forty-three added by Genevan Exiles and twenty-one from Scottish sources. It had one hundred and five tunes, two more than the English Psalter of 1562. Many editions of this Psalter appeared. The edition of 1596 contains a full set of metrical doxologies, named "conclusions."

The edition of 1615 introduces twelve four line tunes called "common tunes" with a name to each. Its notes were equalized in length for the first time, previous editions having been very irregular in usage in this particular.

All these editions gave nothing more than the melodies. In 1629 the "Common Tunes" were increased to fifteen and harmonized in four parts. One of them was a "Report" tune, *i. e.*, a fugue, a reappearance of the old polyphony which was to prove unfortunate a century later. It was not until the edition of 1635 that all the tunes are harmonized. It contained thirty-one "Common Tunes" and eight "Reports" or fugues.

In 1650 a new metrical version of the Psalms was officially adopted and, as in England, was printed without music. There was no separate book of tunes issued and the music of the Scottish Church went into decay, only half a dozen of its old tunes being retained in use.

In the long period between 1565 and 1700 there were only a few psalm tune composers whose melodies have

come down to us. Orlando Gibbons (1583-1625) wrote "Angels' Song" in 1623. William Croft (1678-1727) still is represented in our hymnals with "Hanover" and "St. Anne's," two majestic tunes.

(*e*) *Characteristics of the Psalm Tunes.* In reviewing the psalm tunes we find the following characteristics:

(1) They were syllabic, a note to every syllable, according to the rule laid down by Archbishop Cranmer. This gave weight and dignity to the tunes. Neither the Genevan nor the Gregorian tunes were entirely syllabic, nor had they notes of equal value. "Old Hundredth," for instance, originally was

which, if not so stately, had a more vigorous movement. Cranmer's rule was a protest against the florid sequence tunes of the old Church which made participation by the people impossible.

(2) Their rhythm was very plain and severe, only common time being used. When Croft wrote "Hanover" in 1708 in triple time, it was a sign of a coming change in style.

(3) There was a radical change of chord with every note of the melody. This gave a strong momentum and definite progress to the tunes.

(4) The harmony was distinctly contrapuntal, *i. e.*, the parts moved independent of the melody in the general simple style represented by Goudimel's harmonization of the tunes of the Genevan Psalter. He was not so much the model, as the representative with Tallis of the general current method of harmonizing.

(5) The melodic structure was simple, but well marked and symmetrical. The cadences, both imperfect and per-

fect, were well prepared, and accentuated the joints of the melodic structure.

(*f*) *Surviving Psalm Tunes.* The following tunes are survivals of that old psalmody of the sixteenth and seventeenth centuries:

Wm. Croft	Hanover, St Anne.
Daye's Psalter	Rochester, The Old 137th.
Este's Psalter	Winchester Old, The Old 120th.
Genevan Psalter	Old Hundredth, St. Michael.
Orlando Gibbons	Angels' Song, Gibbons.
Ravenscroft's Psalter	Bristol, St. David.
Scottish Psalter	Dundee.
Thomas Tallis	Tallis' Evening Hymn, Tallis' Ordinal.

(*g*) *The Dark Age of Psalmody.* But this period from the completion of the psalter by Sternhold and Hopkins to the middle of the eighteenth century was very barren from a musical point of view and this for many reasons. (1) This Psalter was very widely introduced and being complete in text and tunes became a sacred tradition that could not easily be changed, as often had been done before. There was, therefore, little occasion for the writing of new tunes.

(2) Moreover, the times were troubled. The contest between Puritan and Cavalier was filling the land with confusion and disorder.

(3) The Sternhold and Hopkins version, with its grievous faults of accent and of diction, and its almost utter lack of poetic merit, had to give place to Rous' version, which, with all its literary improvements, had two fatal faults musically: it was published without music and was largely written in common meter, giving little opportunity for the many tunes of other meters.

(4) Books were few during the troubled times and the

lining of hymns, that is, the reading of each line before it was sung, was generally introduced. What a handicap to the musical part of the service this was can easily be imagined. This unfortunate custom was transplanted to America and only disappeared entirely after the Civil War.

(5) The profoundest reason of all was the decadence of religion not only in the State Church but among the Nonconformists as well. With the former the ritual had become a mere mechanism and a superstition and preaching was secular in spirit and perfunctory in manner; with the latter a rigid orthodoxy and pharisaical emphasis on traditional rules of conduct had displaced the former spirituality and fervour. There was little religious vitality to give urge to musical progress nor religious emotion that demanded expression. Music was at a very low ebb [7] until the Wesleyan movement gave a new religious impetus. Watts' new version had won esteem, and his hymns were more and more widely accepted, but it was not until the Wesleys inspired new tunes to these new hymns that a fresh tide of musical life appeared.

[7] James Leman in 1730 A. D. depicted the condition of psalm singing as follows: "Though we have several very good and easy tunes, yet above five or six are commonly made use of, and scarce one private person in a thousand is able to sing them right: nay, even among the clarks (sic) themselves there are very few who understand so much of music as to be able to sing many of them either."

In 1760 Dr. Cave writes in his "Primitive Christianity": "There is now no singing, either before morning or evening prayer, nor any after the sermon, in most churches. And in the afternoon, the Gloria Patri is often thought sufficient to be sung after the sermon."—Quoted in Curwen's "Studies in Worship Music."

REVIEW QUESTIONS

1. What was the relation in England between the Gregorian and folk-song music before the Reformations?
2. What two severe blows did the Gregorian, or Plain Song, system receive?
3. What was the melodic difference between the Plain Song and the Psalm Tune?
4. What was the beginning of Psalmody?
5. When and how did it begin in England?
6. Who were the leading writers of metrical versions?
7. What were the sources of psalm tunes?
8. Give the leading psalters with notes issued during the latter half of the sixteenth century.
9. Trace the development of the Scottish Psalter.
10. What was the cause of the decay in Scottish church music?
11. Who were the leading harmonizers and composers of early psalm tunes?
12. Give the leading characteristics of the psalm tunes.
13. Give the causes of the dark age of psalm singing.

XXI

THE ENGLISH HYMN TUNE

Class Room Suggestion: It will be helpful to have a typical tune of each of the several schools sung by the class.

Supplementary Reading: Benson, "The English Hymn," Doran, N. Y.; Ritter, "Music in England," Chapters 1, 3, 4, and 10, Scribner's Sons, N. Y.; Breed, "The History and Use of Hymns and Hymn Tunes," Revell, N. Y.; Dickinson, "Music in the Western Church," Scribner's Sons, N. Y.; Curwen, "Studies in Worship Music," Curwen, London; Barrett, "English Church Composers," Low, London.

1. The Transition from the Psalm to the Hymn Tune

The decadence of the psalm singing had one fortunate issue. The need of the human heart to express its religious feelings found vent in a new and more expressive direction. The lyric impulse that again and again had manifested itself in sacred hymns, despite the shackles of the Calvinistic devotion to the Hebrew Psalms, found its expression first in freer and more spontaneous versions, as in Watts and others, and then in independent hymns. That these hymns were dignified, strong, noble, sane, was largely due to the preliminary course of metrical psalms, poor as they often were from a literary standpoint. The hymns were wider in their range of thought and feeling, more exactly the expression of the modern Christian experience, but they had none of the extravagant fancifulness and vague mysticism found in the Roman Catholic hymns of the centuries immediately preceding the Reformation, or in the hymns of the Bohemian Brethren.

In the same way the psalm tunes had prepared the way for the hymn tune. As the psalm tunes were set to metrical versions, they had no structural difference from the succeeding hymn tunes; indeed, we are still using many of them with our hymns.

None the less, the change of mental attitude which made the writing and use of hymns possible, ignoring as it did the previous exclusive use of the psalms, could not but be felt in the composing of hymn tunes. Almost all the typical rules and limitations of the psalm tune were set aside.

Instead of a note to a syllable two to eight notes were slurred to fit a given syllable, going back to the polyphonal usage. Instead of an exclusive use of common time, triple time was allowed and new rhythms were introduced. The rule regarding a radical change of chord for every note of the melody was set aside and the same chord might be the basis of a number of successive notes of the melody.

The former solemnity gave way to greater animation and variety. There was much more flexibility and charm, as well as beauty in the new tunes. The psalm tunes were exclusively an expression of communion with God in worship and penitence; the new hymn tunes, like the hymns to which they were set, expressed many other religious emotions.

2. Psalmody and Hymnody Compared

The gamut of religious feeling to be expressed had been greatly extended by the evangelistic spirit and the emphasis of subjective experience introduced by John Wesley and his associates. Even the new versions of the Psalms by Isaac Watts and others had a freedom and a spiritual fervency unknown before. The old mechanical

lines, never straying very far from the literal phraseology of the Psalms, gave place to a more spontaneous and emotionalized expression of the general thought of the Psalms. The Psalms had been deo-centric; the doctrine of the sovereignty of God had underlain them all. There was no self-consciousness in them. Even the consciousness of sin had but added poignancy to the recognition of the infinite perfections of the divine nature.

The new hymnody on the other hand gave large recognition to the human factor in religion. The hymns became personal. They were filled with varied human emotion. Bishop Christopher Wordsworth fulminated against the first person singular in modern hymns and praised the pure objectivity of the elder hymns, but the human element in religion was to have its lyric day.

It inevitably followed that the tunes to which these new hymns were to be sung should be emotional, spontaneous, popular. The new wine of conscious salvation burst the old bottles of rigid psalmody and created a new church music of its own.

3. The Wesleyan Stimulus to New Hymn Tunes

While the new hymnological movement was not Methodistic in origin, although it received a larger sweep of thought and a deeper spiritual vitality from that organization, there can be no doubt of the Wesleyan initiative in regard to the music.

The evangelistic work of the Wesleys called for something more than merely devotional, worshipful music. The new hymns of personal experience, joyous, inspiring, estatic, demanded emotional tunes. The effort to win the unsaved in popular meetings, large and small, made attractive, spirited, exciting singing extremely important. Hence the Wesleys consciously encouraged

the composers of the day in providing the music that they needed, as in the case of Lampe, who wrote tunes to twenty-four hymns by Chas. Wesley issued in 1746.

4. The Rise of Fugue Tunes

The "reports" of the Scotch were the precursors of the new fugue tunes which became the feature in the hymn tunes of the eighteenth century. Many of these elaborate tunes had artistic value and added musical interest to the church services. They helped to break up the rigidity of the psalm tune conception of congregational singing and opened wider resources and gave greater freedom of melodic suggestion to the composer. But they were more studied and less spontaneous in the composition; they called for more attention in the rendition to the music itself at the expense of the sentiment of the hymn. The old temptation of solving melodic puzzles to which the mediæval composers yielded, again was felt. Moreover, the old contrapuntal knowledge and skill, the result of generations of apprenticeship, was absent and many of the new fugal tunes were formless, rude, and unmusical. In spite of this lack of contrapuntal training, some of these tunes had melodic strength enough to survive the eclipse of the style as in the case of "Lenox" by Lewis Edson and "Geneva" by Thomas Cole.

5. The Florid School of Hymn Tunes

Even the plain tunes became increasingly florid in style until they gave to the whole tendency the title of the "Florid School" and brought it into disrepute. This disrepute was not lessened by the antagonistic attitude of the conservatives, both Anglican and Nonconformists, who still cultivated the old syllabic tune, preferring its worshipful spirit and stateliness.

Many of these new tunes deserve the criticism which they met, being secular, complicated and impracticable, but the whole movement was a very valuable one, breaking down the mechanical rigidity that had already wrecked the musical efficiency of the churches of England. If in the reaction against the spiritless, barren church music in which the psalm tune period ended, the pendulum swung too far, that is the usual course of the human pendulum.

Time has shorn away the excesses and abuses of the "Florid School" and has left us a heritage of tunes yet effective whose non-existence would have impoverished our present hymnals, and made them less efficient. The list of surviving tunes from this period prove its elements of value.

Adeste Fideles	by John Reading (?) (1677-1764).
Amsterdam	by J. Nares (1715-1780).
Arlington	by Thomas Augustine Arne (1710-1778).
Avison	by C. Avison (1710-1770).
Cambridge	by Ralph Harrison (1748-1810).
Christmas	by George Frederick Haendel (1685-1759).
Duke Street	by John Hatton (?-1793).
Easter Hymn	by John Worgan (?) (1724-1790).
Marlow	by J. Chetham (?-1763).
Martyrdom	by Hugh Wilson (1764-1824).
Miles Lane	by Williams Shrubsole (1760-1806).
Philippi	by Samuel Wesley (1766-1837).
Rockingham, Old	by Edward Miller (1731-1807).
St. Thomas	by Aaron Williams (1731-1776).
Shirland	by Samuel Stanley (1767-1822).
Silver Street	by Isaac Smith (1735-1800).
Wareham	by William Knapp (1698-1768).
Warrington	by Ralph Harrison (1748-1810).
Warwick	by Samuel Stanley (1767-1822).

6. The Modern Hymn Tune

It would be a mistake to conceive of these successive schools of hymn tune composers as representing chronologically defined epochs. They not only had periods of transition, but actually overlapped each other or even were contemporary. New English and Scotch tunes appeared at the same time that the Genevan and German tunes were introduced. In the early "reports" and the later fugue tunes the old polyphonal style persisted. Before the "Florid School" developed, Croft, Jeremiah Clarke and others were taking liberties with the established rules of psalm tune writing. After the "Florid School" was widely recognized, the old diatonic school still had many adherents and its influence persisted. Both the progressives and the conservatives are ever in evidence. The new hymnological tide and the "Florid School" tunes were both largely Nonconformist, while the Anglicans, with their abiding conception of the public service as mainly worship, continued to use the psalm tunes and opposed the new melodies as secular and irreverent. So that while the new hymn tunes multiplied and grew ever more elaborate and emotional, the old syllabic tune persisted in the Established Church.

But this conservative element could not wholly escape the spirit of the age. Dignity and worshipfulness were still manifest in the general syllabic character of the tune and in its succession of radical chords for every note, but there was a little more rhythmic emphasis, a more pronounced musicalness, a little more emotional appeal. Such writers as the following well represent this tendency.

William Boyce (1710-1779)	—Sharon, Chapel Royal.
Chas. Burney (1726-1814)	—Truro.
John Wall Callcott (1766-1821)	—Callcott.
Henry Carey (1685-1743)	—America, Carey's.
John Darwall (1731-1789)	—Darwall's 148th.
Felice de Giardini (1716-1796)	—Italian Hymn.
William Hursley (1774-1858)	—Hursley.
John Wainwright (1723-1768)	—Yorkshire.
Samuel Webbe (1740-1816)	—Benevento, Come, Ye Disconsolate.[1]

7. The Later Modern School

This conservative school in the next generation yielded still more to the prevailing tendency and approached the sedater element of the "Florid School," though they rarely transgressed the Cranmerian rule of a note to a syllable. Individuals in the school differed in their severity of taste. Gauntlett, for instance, denounced Samuel Seb. Wesley's "Aurelia" as cheap and meretricious, because its harmonic strength did not reach up to his standard. In general efficiency, however, the obnoxious tune was more valuable than all of Gauntlett's tunes put together.

The following composers were the more notable representatives of this Conservative Modern School:

William Hutchins Calcott (1807–1882), Intercession (new).

Henry John Gauntlett (1805–1876), St. George, St. Albinus.

John Goss (1800-1880), Bevan, Glad Tidings, Transfiguration.

William Henry Havergal (1790–1870), Evan.

George Alexander Macfarren (1813–1887), Bridegroom.

[1] "Come, Ye Disconsolate" is not entirely in place here. It was adapted from one of Webbe's many glees.

Samuel Sebastian Wesley (1810–1876), Harewood, Aurelia, Hora Novissima.

8. The "Hymns Ancient and Modern" School

In 1858 Rev. Sir Henry Williams Baker, Bart., took the initial steps which culminated in the famous hymnal, "Hymns Ancient and Modern," which set a new standard in the editing of church hymnals. Incidentally, by attracting and giving opportunity for new composers, the book was the occasion of an advanced school of hymn tune writing. It was still syllabic, but in general its melodies had less definiteness of design than the preceding school.[2] The individuality of this school lies in its emphasis upon the expressiveness of the harmony rather than upon its melody.[3] It is ultramodern in its large use of discords as distinguished from the concords of its predecessors. This adds poignancy to its effects and aggressiveness to its movement. It is a far departure from the serenity and stateliness of the elder tunes. Indeed, it is a recrudescence of the exciting discords of savage music, but without its stress of the rhythm. It is depressing to the nervous system and not stimulating. "Nicea" is perhaps its most inspiring tune, but that does not hurry the pulse as does "Old Hundredth" or "Duke Street" or "Coronation."

The most typical composer of this school is John B. Dykes. His tunes display its characteristics most consistently and unfailingly. He is also the most prolific

[2] "Eventide," "Almsgiving," "Nicea," and "Lux Benigna" are exceptions.

[3] The composers of these tunes were or are connected with cathedrals or with other large musical resources as organists and otherwise, and are High Church in attitude. Their music, therefore, is essentially organ rather than vocal in its character.

writer among them. Joseph Barnby is usually classed with this school, but is more tuneful than the majority. Some of the tunes written by other writers in this style do not markedly differ from those of the preceding generation. The most important composers and their most successful tunes are as follows:

Henry Williams Baker (1821–1877), Stephanos.

Joseph Barnby (1838–1896), Laudes Domini, Twilight, Paradise, March to Victory, Crossing the Bar.

John Bacchus Dykes (1823–1875), Nicæa, Almsgiving, Vox Dilecti, St. Agnes, Hollingside, Alford, Vox Angelica, Lux Benigna.

George Job Elvey (1816–1893), Diademata, St. Georges Windsor.

Edward John Hopkins (1818–1901), Benediction, Children's Voices.

Timothy Richard Matthews (1826–1910), Margaret.

Wm. Henry Monk (1823–1889), Eventide.

Albert Lister Peace (1844–1912), St. Margaret.

Henry Smart (1813–1879), Regent Square, Lancashire, Pilgrims.

John Stainer (1840–1901), Magdalen.

Charles Steggall (1826–1905), St. Edwards.

Arthur Seymour Sullivan (1842–1900), St. Gertrude, Lux Mundi, Proprior Deo, St. Edmund, Cardiff, Homeland, Angel Voices.

9. Present Tendencies

This latest school in hymn tune writing has passed away. What few tunes are being written in Great Britain are imitations of the foregoing, with added emphasis of their value as organ pieces rather than as tunes to be sung.

There is an increasing movement to revive the old

Plain Song melodies by harmonizing and to some extent mensurating them. As might be conjectured, this is a High Church tendency, based on a sense of obligation to the traditional, rather than on any inherent tuneful value in the old formless melodies. Its advocates are organized and have had enough influence to secure considerable representation for the Plain Song arrangements in the later editions of "Hymns Ancient and Modern."

REVIEW QUESTIONS

1. What compensation was there for the decadence of psalm-singing?
2. What changes took place in the tunes in becoming hymn tunes?
3. Give the fundamental difference between the metrical psalm and the hymn.
4. What was the relation of the Wesleys to the new hymn tunes?
5. What were the characteristics of the Florid School?
6. What was the origin of the fugue tunes and to what evils did they lead?
7. Give some of the useful hymn tunes that were composed during this epoch.
8. What were the relations of these several schools of hymn tunes?
9. What changes took place in the conservative syllabic tunes during the eighteenth century?
10. Give the leading composers of this later conservative school and their surviving tunes.
11. Who were the leading conservative composers of the succeeding generation? Give their most acceptable tunes.
12. How did the "Hymns Ancient and Modern" school of hymn tune composers arise?
13. What lines of change did the composers follow?
14. Who were the most important writers of this school? Name their most successful tunes.
15. What are the present tendencies in recent English hymn tune writing?

XXII

NEW ENGLAND PSALMODY

Supplementary Reading: Ritter, "Music in America," Scribner's Sons, New York; Grove, "Dictionary of Music and Musicians," Vol. VI, Article "Tune Books," Presser, Philadelphia; Dickinson, "Music in the Western Church," Scribner's Sons, New York; Curwen, "Studies in Worship Music," Vol. I, Article "New England Psalmody," Curwen, London; E. S. Ninde, "The American Hymn," Abingdon Press, New York.

1. Early American Music Puritan

(*a*) *Puritan not Pilgrim.* The original birthplace of American music was Boston, not Plymouth; that is, it was the Puritan, not the Pilgrim who gave the first impulse to the publication of church music. The Pilgrims sang psalms, it is true, for Mr. Winslow's account of the founding of the colony at Plymouth states that "We refreshed ourselves with singing of psalms, making joyful melody in our hearts as well as with the voice, there being many of our congregation very expert in music and indeed it was the sweetest music that mine ears ever heard." But the cares and privations and severe labours of their pioneer life left little room for the culture of music and it soon fell into decay. Moreover, Plymouth had little intercourse with England or the outside world.[1] But Puritan Boston was in constant com-

[1] It should also be remembered that the Pilgrims were separatists, very narrow sectarians, who were out of sympathy with the general body of Puritans, in America as well as in England. It was the Puritans, not the Pilgrims, who gave character to New England and laid the foundations of its intellectual life and culture.

munication with England and soon became the gateway through which came a steadily increasing immigration from England. Among these newcomers were men of affairs, and professional men with education and culture, some of them graduates of Cambridge and Oxford. There was an intellectual atmosphere favourable to increase of culture of all kinds, and more means with which to secure it. Music shared in the more favourable opportunities of the Puritan community.

(*b*) *Puritan not Cavalier.* An even more striking fact is that the Cavaliers of Virginia and the South had no share in the original musical impulse among the colonists. They had superior wealth, and more social standing and culture, and they had back of them the traditions and resources of the English Established Church. They lacked, however, the primary urge for the culture of music, the religious spirit. It may be added that the very elaborateness of church music in the home church discouraged the colonists with their lamentable lack of musical resources from attempting to keep up the standard. What music they had was a very faint echo of the music of the Established Church in England which again was in a state of decadence, as far as the country at large was concerned. It is true that English singers gave operatic performances in southern cities long before any appeared in Boston, but this interest struck no root in the soil.

2. Divided Opinions Regarding Psalm Singing

With the independent, individualistic mental attitude of the Puritans, there were certain to be eccentricities of opinion regarding music. Some held with Zwingli, that Christians should not sing at all. It was frivolous and worldly. The only Biblical requirement was to "make melody in their hearts." Others contended that only pro-

fessed Christians had a right to sing, suffering the general congregation to join in only an "amen." Others would allow only men to sing. Still others, with the strange perversity that finds satisfaction in opposing generally accepted ideas or usages, objected to the singing of the psalms.

The Rev. John Cotton entered the lists in 1647 with a tract, "Singing of Psalms a Gospel Ordinance" in which with great ability and skill he replied to all these vagrant notions in an unanswerable way and greatly cleared the musical atmosphere. He not only put music in the church service in its proper place, but paved the way for private musical enjoyment and culture.

3. New England Psalters

(*a*) *Ainsworth's Psalter.* The Pilgrims brought over with them from Leyden Ainsworth's version of the Psalms which continued in use for seventy years. In this psalter the melodies occurred over the psalms, they were printed in lozenge or diamond shaped notes, without bars. It was Genevan rather than English in character. This psalter was unknown to later immigrants and had no extensive use, disappearing from among the people in the course of years. Lining out the hymns was introduced among the Pilgrims about 1680.

(*b*) *The Sternhold and Hopkins Psalter.* The other communities of New England used the Sternhold and Hopkins version as far as they used any. Musical culture was at a very low ebb and readers of musical notation were very few.

(*e*) *The Bay Psalm Book.* In 1640 appeared the "Bay Psalm Book." It was edited by a committee of ministers at the head of which were Welde, Mather, and Eliot. It was an entirely new version intended to be more

scriptural than that of Ainsworth. The preface consisted of a discourse establishing that psalm singing was both lawful and necessary. It went through no less than seventy editions in the succeeding century and a half. It contained no music until the ninth edition in 1696 which contained only a few tunes with air and bass. These were taken from Playford's Psalter, which we have seen was issued in 1671. Improved by Dunster and Lyon, it was reprinted in England in eighteen editions and in twenty-two in Scotland,—America's first contribution to the church music of England, but by no means the last.

4. The Decadence of Congregational Singing and Efforts at Reform

(*a*) *The Low State of Church Music.* The scattered population with no opportunity for musical instruction soon lost what musical skill it had brought over from England. Books with tunes were not only few but of various kinds. The more difficult tunes were either forgotten or so changed by the ignorance, forgetfulness or irresponsible vagaries of leaders that they greatly varied in different communities. Presently not more than ten tunes were in general use and many congregations were confined to five, "York," "Hackney," "Windsor," "St. Mary's," and "Martyrs." If contemporary accounts may be accepted at face value, the tone quality of the congregational song left much to be desired.[2]

[2] Eliot, the great Indian apostle, in an essay on church music describes the situation as follows: "Where there is no rule, men's fancies (by which they are governed) are various; some affect a quavering flourish on one note, and others upon another, which (because they are ignorant of true music and melody) they account a grace to the tune; and while some affect a quicker motion, others affect a slower and drawl out their notes beyond

(*b*) *Efforts at Reformation.* The musical situation became so offensive to devout ministers that a strenuous effort was made by prominent clergymen like Mather, Edwards, Symmes, Dwight and others to institute a reform by organizing singing schools in their various communities. They wrote tracts, they preached sermons, they sought to encourage singing teachers.

But they found vehement opposition in the congregations themselves. Elders and deacons, who saw their prominence in their respective congregations endangered if they were displaced in the lining of hymns and in their ostensible leadership in the song, antagonized the "new way" of singing by note.[3]

Eliot laments that "instead of one heart and one voice in the praises of our Glorious Creator and most bountiful Benefactor, there should be only jangle, discord and slurring and reviling one another."

After about 1720 singing societies were organized in various parts of New England. They appealed to young people in both a musical and social way. Reforms in the music were instituted in leading churches in Boston, Cambridge, Roxbury, Dorchester, Charlestown, Andover, and other towns in the vicinity of Boston.

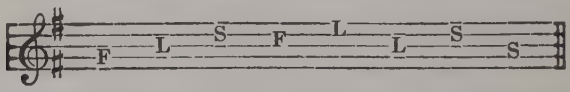
(*c*) *Instruction Books in Psalm Singing.* The great

all reason; hence in congregations ensue jars and discords, which make singing rather resemble howling, and this drawing out the notes to such a length is the occasion of their tittering up and down, as if the tunes were all composed of quavers and make 'em resemble tunes to dance to."

[3] "This way of singing seems to be derived from the French, and looks like popery; and it seems to be introductory thereunto."

Another objection was "against the tone used in singing by rule; and the particular syllables, mi, fa, sol, la, used in learning; some called it a negro tone, others a squealing tone, unbecoming the worship of God."

need was for books of instruction in singing and in 1714 "An Introduction to the Singing of Psalm Tunes" was issued by Rev. J. Tufts, of the Second Church, Newbury. He was the first follower in this country of the "Jack o' Lantern" of simplified notation. Instead of notes he placed the initials of fa, sol, la, mi as follows:



It will be noticed he did not follow the Guidonian system of syllables.[4] He supplied thirty-seven tunes taken from Playford's "Book of Psalms." All but one were in common meter.

Rev. Thomas Walter of Roxbury, Mass., issued another instruction book in 1621 entitled "The Grounds and Rules of Music Explained." A number of the most prominent ministers in New England signed a prefatory recommendation of the book, displaying their interest in the development of skill in reading notes. The "Instructions" are again compiled from Playford. The tunes were printed with bars for the first time in America, but it was a merely mechanical imitation of Playford's barred music. This book was very successful and passed through many editions. It deserves to be credited with a large share of the advancement that now began to be made in New England Psalmody.

In this class of books the music soon constituted the large part of them. The English collections of W. Tansur and Aaron Williams were freely drawn upon by Daniel Bailey in 1755, by James Lyon in 1761, by Josiah Flagg in 1764. Not only psalm tunes but anthems and

[4] One, two and three, and four, five and six, of the scale were both "fa, sol, la," while seven was "mi." The problem was to find "mi."

"fuguing choruses" begin to appear. This was due to the increase in choirs and their ambition to sing something more interesting and attractive than plain psalm tunes.

(*d*) *The Abrogation of Lining Out the Hymns.* Psalm books were increasing in number in the churches, and the need of lining out the hymns passed away. There rose objections to the custom from leading ministers and from the singers whose work it hindered. Absurd and even laughable incidents occurred. When the clerk read out,

"The Lord will come, and he will not,"

or

"Keep silent, but speak out,"

the absurdity did not conduce to devoutness. But as often happens in church work a temporary makeshift by overlong use had become sacred to many devout minds, and there was vehement objection to the abrogation of this custom. There were actual clashes between the clerk who did the lining out of the hymns and the choirs who sang straight on through the hymn, ignoring them.[5]

5. The Rise of American Psalm Tune Composers

There had been a few new psalm tunes in the books of Bailey and Lyon. The tune "Mear" is possibly of even earlier American origin. While hitherto the colonies had gladly turned to the mother country for its music of all kinds, the rising spirit of independence and the political resentment against the growing exactions of

[5] The choirs did not always win the battle! In one Massachusetts town in which the choir ran away with the tune, the deacon rose after they were through, calmly set his spectacles on his nose and said, "Now let the people of God sing" and he lined out another psalm.

the English government found their manifestation in musical lines as well.

(*a*) *William Billings.* The first American composer* was William Billings, born 1746 at Boston and died there in 1800. He was not a professional musician, but a tanner. He had only such training as the singing schools and the current books of instruction in singing psalm tunes afforded. Physically he could not have been very prepossessing; he was blind in one eye, one arm was withered, one leg was shorter than the other and he took snuff incessantly! Yet he was countenanced by such men as Governor Samuel Adams and Dr. Pierce of Brookline. He had a stupendous voice that submerged all others.

But above all he was an ambitious fiery spirit which rose above his handicaps. He was not satisfied to write plain psalm and hymn tunes but essayed anthems in fugue and canon. In 1770 he issued his epoch-making book "The New England Psalm Singer." The motto on the title page was appropriate enough from several considerations (age, twenty-four years, and lack of training): "Out of the mouths of babes and sucklings hast thou perfected praise." Conscious of his shortcomings, his preface was a reasoned defiance of the established rules of harmony and counterpoint.

But age brought discretion and his next book, issued in 1778, "The Singing Master's Assistant," showed much more deference to accepted rules of composition. Criticism and experience had prompted study of the formerly resented rules. But even at his best Billings

* That Judge Hopkinson and James Lyon preceded Billings by several years is undoubtedly true, but their compositions were slight and had no influence. They can safely be considered as negligible, except to antiquarians.

was a poor harmonist and an almost impossible contrapuntist.[7]

The list of his other books is as follows:

"Music in Miniature," 1779. A collection of psalm tunes of various meters.

"The Psalm Singer's Amusement," 1781. A collection of fuguing pieces and anthems.

"The Suffolk Harmony," 1786. A collection of tunes, fugues, and anthems.

"The Continental Harmony," in 1794. A collection of anthems, fugues, and choruses, all of them new.

Whatever his shortcomings, and his handicaps, the stuff was in him! His tunes were his own; they fitted the feeling of the words; they were singable—all virtues that cannot be too highly commended. There was a spontaneity and vigour in him, an individuality of style that was typically American. His "Easter Anthem" is still found on octavo lists and is sung with enthusiasm.

His books had all the larger opportunity that the New England people turned against all things English when the war of the Revolution came on. He threw himself into the war with all his energy. He could not fight, but he could sing and he could write patriotic songs, which he proceeded to do. He paraphrased the psalms and gave them a political and patriotic guise. Of course he also wrote tunes for them. His music was popular in camp and choir and home. His tune "Chester" was

[7] How fond he was of fugues may be gathered from his rhapsody: "It has more than twenty times the power of the old slow tunes; each part straining for mastery and victory, the audience entertained and delighted, their minds surpassingly agitated and extremely fluctuated, sometimes declaring for one part and sometimes for another. Now the solemn bass demands their attention —next the manly tenor—now the lofty counter,—now, the volatile treble. Now here, now there, now here again. O ecstatic! Rush on, ye sons of harmony."

sung in bleak New England and amid the cane-brakes of South Carolina.[8]

[8] CHESTER

William Billings.

1. Let ty-'rants shake their i - ron rod,
2. The foe comes on with haught - y stride,

And slav-'ry clank her gall - ing chains:
Our troops ad-vance with mar - tial noise;

We'll fear them not, we'll trust in God;
Their vet-'rans flee be - fore our arms,

New England's God for - ev - - er reigns.
And gen-'rals yield to beard - - les boys.

Note that while the soprano has a singable melody, the tenor has the more vigorous tune. That may explain its remarkable popularity in the Continental army.

(*b*) *Other American Tune Composers.* Billings' success could not but lead others to emulate him as composers. Andrew Law (1748-1821) issued quite a series of books, beginning with "Select Number of Plain Tunes" (1767) and ending with "Art of Playing the Organ" (1809). He was the antithesis of Billings, thorough, pedantic, but tiresome. One only of his tunes, "Archdale," had any wide use. None the less, his books were useful and tended to lift the standard of musical taste and accuracy. He has the reputation of having transferred the tune to the soprano, but this had been done earlier by Tufts, Walter, and Bailey, copying from Playford. He was the father of shaped notes.

Less notable successors were John Stickney (1744-1827), Daniel Read (1757-1836), composer of "Lisbon" and "Windham," Timothy Swan (1758-1842), composer of "China," and others.

Oliver Holden (1765–1834?) deserves notice as the composer of America's most notable hymn tune, "Coronation." He issued "The American Harmony" in 1792 and "The Union Harmony" in 1793. His fugues were rather "home-made,"—crude and incorrect.

Samuel Holyoke (1771-1816) is notable in that he was the first of his generation to omit fugues in his "Harmonia Americana," in 1791, issued when he was but twenty years of age. One can feel the heat of the young reformer's zeal when he says in his preface, "Perhaps some may be disappointed that fuguing pieces are in general omitted. But the principal reason why few were inserted was the trifling effect produced by that sort of music; for the parts falling in, one after another, each conveying a different idea, confound the sense, and render the performance a mere jargon of words." But as often happens, the work of the reformer was not

superior to those whose compositions he condemned. He produced nothing worthy of preservation.

REVIEW QUESTIONS

1. Why was Boston, rather than Plymouth or Jamestown, the birthplace of American music?
2. What divided opinions were there among the early Puritans regarding psalm singing?
3. What three psalters were in use among the early Puritans?
4. Why did a decadence set in with reference to psalm singing?
5. What tunes were chiefly used during this dark age of New England Psalmody?
6. What lines of reformation were pursued?
7. Who were leaders in this movement?
8. What instruction books in psalm singing were issued?
9. From what common source were their tunes taken?
10. What collections of psalm tunes were issued and from what sources taken?
11. What unfortunate method had been used to provide for the lack of books?
12. What influences favoured the writing of American psalm tunes?
13. Give the characteristics of the first American psalm tune composer.
14. Give the name of the first American psalm tune book and its leading features.
15. What were Billings' patriotic activities?
16. Name the editors of other collections of American psalm tunes.
17. Why is the name of Oliver Holden noteworthy?
18. Who made the first effort to do away with fuguing tunes?

XXIII

THE AMERICAN HYMN TUNE

Supplementary Reading: Ritter, "Music in America," Scribner's Sons, New York; Grove, "Dictionary of Music and Musicians," Vol. VI, Presser, Philadelphia; Dickinson, "Music in the Western Church," Scribner's Sons, New York; Curwen, "Studies in Worship Music," Curwen, London; Benson, "The English Hymn," Hodder and Stoughton, New York.

1. Transition from Psalm to Hymn Tunes

The transition from the use of metrical versions of the Psalms to hymns was long and sometimes fiercely contended, especially in Pennsylvania and the West where the Scottish element predominated. Watts' version of the Psalms almost everywhere prepared the way for his hymns. His "The Psalms Imitated" was reprinted by Benjamin Franklin in Philadelphia in 1729, but it remained upon the publisher's shelves unsold. Ten years later his Hymns were printed in Boston.

"The Great Awakening," with its urgent demand for more spontaneous lyrical expression of the new religious experience, favoured the use of the new hymns, and they gradually crept in as appendixes to collections of the general metrical versions of the Psalms. Many of the tunes of the Billings epoch were already set to these hymns of Watts and to a slight extent of the Wesleys. Within a few decades the hymn had displaced the metrical version in most New England congregations and hence we may now treat of the hymn tune.

2. The Reaction Against the Popular Psalmody

The extravagance and the crudity of the Billings school presently produced a violent reaction, particularly among persons of culture or of serious devoutness. Prof. John Hubbard of Dartmouth College in 1807 declared that "Almost every pedant, after learning the eight notes, has commenced author. With a genius sterile as the desert of Arabia, he has attempted to rival the great masters of music."

Learned ministers inveighed against the prevalent style of psalmody. Many of them considered omitting music entirely from their services, claiming that the effects of their most impressive sermons were obliterated by the succeeding fuguing tunes. Such a prejudice arose against the current American music that in 1812 the compilers of "The Bridgewater Collection" excluded it entirely, depending on English reprints for its material.

The increasing number of English immigrants with musical training and culture, and even of well-trained organists and other musicians, only increased the general reaction. The importation of English anthems and oratorio numbers gave a tangible standard which made the crudity, commonplaceness, and bad taste of the current church music more evident.

But these expressions of superior culture and taste were confined to the larger centers of population and scholarship, where musical societies were introducing and studying the best choral music of England and the Continent. The leading organization of this kind was "The Handel and Haydn Society" of Boston which was to exercise a notable influence in behalf of better church music.

Still the tide of singing school and psalm tune books

rose even higher as one may see from the long catalogue of titles in Vol. VI of "Grove's Dictionary." To get a vivid realization of the situation one must remember the small population to which they appealed for support.

3. The Practical Value of this Undesirable Music

It would be a very one sided and inadequate view of this crude music to condemn it utterly. It contained some strong spontaneous melodies despite their slipshod and inadequate harmonization. In essential musical value, aside from the technical contrapuntal and harmonic accuracy, it was not inferior to most tunes written in England. It kept the impulse to write new tunes alive and so prepared the way for better work later.

What was most important of all, perhaps, was the training of the singers secured in the community singing schools by means of the treatises on the elements of music prefixed or appended to the tune books. When the better music arrived it found the singers of even obscure country communities ready to sing it, for they were organized into choirs and trained to sing together. Moreover, the very desire for something new to sing, that called forth the overabundant tune books, opened the door wide for the better music that succeeded.

4. The Organization of Musical Conventions

The valuable pedagogical side of church music found its opportunity when the choir singers were gathered together annually in great musical conventions. The movement originated in 1829 in New Hampshire. Lowell Mason and his associates in the Boston Academy of Music saw the advantages of the plan and from 1834 on the musical convention was the outstanding method

of creating interest in church music from Maine to Baltimore and from Boston to Cincinnati.

For nearly forty years these conventions kept up the interest in church music and choral singing. The leaders were Lowell Mason, George J. Webbe, L. O. Emerson, B. F. Baker, George F. Root, Isaac B. Woodbury, C. C. Case, James H. McGranahan, and P. P. Bliss. H. R. Palmer was perhaps the last of this generation of convention leaders.

In these conventions were lectures on general musical topics, classes in voice training, harmony classes, private lessons in solo singing, musical composition, piano and the like. The chief feature always was the elucidation of nice points of notation and the chorus training culminating in the singing of some great oratorio or operatic chorus, or even of the whole oratorio, such as "The Creation," "Messiah" or "St. Paul."

The cultural value of such a gathering of choir leaders and singers from remote communities as well as musical centers will be realized at a glance. The pity is that instead of developing still further, and preparing the way for a genuine American choral music, it went into decay because of the tide of foreign leaders out of sympathy with American music and the tyranny of the piano which submerged the purely American tendencies.

5. The Pioneer Work of Thomas Hastings

One of the most thoughtful and sensible teachers and editors of this period of musical preparation was Thomas Hastings (1787-1872), a Connecticut Yankee, whose chief work was done in northern New York. Being a very religious man, his fundamental proposition was that in church music the religious element must predominate. Hence not only in teaching choirs and choir conventions,

but in his writing of hymn tunes, he sought religious effects rather than technical or even artistic excellence. His book on "Musical Taste," issued first in 1822, and again in 1853, is bitterly opposed by the fanatics of musical art, but contained the essence of the matter, none the less.

Mr. Hastings' influence in displacing the mere singing school atmosphere in the work of choirs with the religious and truly devotional was both needed and salutary. He issued a great number of books both of instruction and of tunes which had a wide use, also some juvenile hymn books.

His surviving tunes are first "Toplady," then "Ortonville," with "Retreat," and "Zion," following close after.

He was even more successful as a hymn writer. Of his six hundred hymns, our hymnals still offer his "He that goeth forth with weeping," "How calm and beautiful the morn," "Hail to the brightness of Zion's glad morning," last verse of "Come, ye disconsolate," "Gently, Lord, oh, gently lead us," and "Jesus, merciful and mild." The work of Hastings was largely done in connection with Presbyterian congregations, while Lowell Mason more particularly influenced the Congregationalists. It may be said that Hastings furnished the devotional spirit, while Mason supplied the organizing force to the movement of reform.

6. The Reform Under Lowell Mason

A greater man than Thomas Hastings was Lowell Mason (1792-1872), born at Mansfield, Mass. Intended for a mercantile career, his musical impulses were too strong. A resident of Savannah, Georgia, he compiled a book of church music for his church choir, based on

the "Sacred Melodies" of William Gardiner of England, with hymn tunes and anthems of his own, which "The Handel and Haydn Society" published in 1822. The success of this venture led to Mason's devoting himself wholly to music.

It was as a teacher rather than as a composer of music that Mason first gained prominence. He was the president and *ex officio* director of "The Handel and Haydn Society" for some years. He was made the head of "The Boston Academy of Music." In 1837 he was what would now be called "musical supervisor" of the city of Boston for a year, serving without salary in order to prove the value of musical instruction in the public schools. He was, therefore, the pioneer in public school music.

He lectured on church music in the churches, not only of Boston, but of all New England and even in the West, advocating a reform in the church music, urging simplicity and religious genuineness in the service of song. He early saw the great opportunity afforded by the musical convention and led in its development. He realized that musical teachers needed to be taught how to teach.

But it was as a compiler of books for singing schools and choirs that he did his most memorable work. A strong advocate of congregational singing, his hymn tunes had the virtues of singability, smoothness and simplicity. While not elaborate in harmony, they still had strength and variety, and—what preceding American hymn tune harmonizers lacked—accuracy.

But Mason had a talent for seeing hymn tune possibilities in varied kinds of music. The need of filling his large books with varied music stimulated that talent with happy results in many cases. He made the folk-songs of Germany, the glees of England, the arias and choruses

of classic composers, all pay tribute to his department of hymn tunes.

The result was a variety of style in his tunes that has been criticized as displaying a lack of unity. There is the same difference in his own tunes. Compare "Uxbridge" with "Bethany." But this is not a fault; it is a distinct merit. Why should all tunes be cast in a single mould? The criticism is a bit of academical narrowness.

Mason had his enemies, as might be expected of a reformer. The conservatives still preferred the fugues and resented the simplicity of the new tunes. But his most bitter enemies were the impracticable musical idealists and devotees of foreign artistic music, who fulminated against Mason and his coadjutors as cheap and meretricious and commercial in spirit at the very time when they were spreading the gospel of good choral music throughout the land.

Mason was a great man in his personality, in his ideals and forward looking aggressiveness, rather than as a musical composer. He wrote good, singable, admirable hymn tunes, the miniatures of church music; but he had no talent for larger work. His anthems are weak and uninteresting and none of them have survived.

His younger contemporary, L. O. Emerson, was not so popular a tune artificer, but he commanded the larger forms with vastly more force and freshness, writing anthems that are still useful and adapted to present volunteer choirs—"Guide Me, O Thou Great Jehovah," for instance—and adapting oratorio and operatic choruses to the needs of popular choruses in a masterly way.

Mason did not write tunes to specific hymns, but wrote a tune and then found a hymn that suited it. Superficially considered that would seem like inverting the natural order; but it had its advantages. If the tune had

been composed to a specific hymn, the temptation would have been irresistible to give expression to its smaller phrases and it would have been unfitted for any other hymn. This would do for a few tunes like "Nearer, My God, to Thee" or "My Faith Looks up to Thee," but the mass of hymn tunes must be self-contained and objective in order to carry hymns of varied emotions.

The work of Lowell Mason was not confined to America. His tunes were widely reprinted in Great Britain and marked a new epoch in church music there, more particularly among the Nonconformist churches. Indeed, the later Established Church music owes to him a fresh impulse that developed into the Modern School of hymn tunes. No less than thirty-four of his compositions appear in the current Scottish hymnals, many of them in all the collections.

7. The Associates of Lowell Mason

The influence of Mason did not end with his own compositions. As a masterful personality, he was bound to gather about him other men whose ideals he helped to shape. The more prominent of these were George J. Webb (composer of the tune, "Webb"), George F. Root (Varina), Heinrich C. Zeuner (Missionary Chant), L. O. Emerson (Sessions), Wm. B. Bradbury ("Woodworth," "He Leadeth Me," etc.), and many others like B. F. Baker, L. H. Southard and W. O. Perkins whose work does not continue in use. There were others like Isaac B. Woodbury (Dornance, Siloam, Nearer Home), who, while not immediately associated with Mason, shared in the general movement and its ideals.

8. The Close of the American Hymn Tune Epoch

With Bradbury this American hymn tune epoch may be

said to have closed. The rise of the Sunday-school and the Gospel Song attracted the writers of popular church music and the practical disappearance of the community singing school ended the vogue of the old oblong tune and anthem books. In so far as they continued, they were secularized, containing popular songs and glees.

The extraordinary popularity of "Hymns Ancient and Modern" in Great Britain led to its reprint in America, and the new school of hymn tunes represented by Dykes and Barnby appealed strongly to the more cultured musicians and hymnal editors. The popular tunes of Mason and Bradbury were copyrighted and their publishers asked such high prices for permission to use them that it was a matter of thrift to use instead the English tunes that were free. The artistic and commercial impulses coöperating against the use of the American hymn tunes, for some years they took a minor place in ostensibly high class hymnals. But they are coming into their own again; in the more recent hymnals their use is increasing.

Unfortunately these English hymn tunes have had no reproductive vitality in America. A few imitations have occasionally appeared in our hymnals, but with the exception of "Materna" by Samuel A. Ward and "All Saints, New" by Henry S. Cutler, they have died still-born. A few tunes have been taken over from the Sunday-school and Gospel Song movement such as "Pilot" by J. E. Gould (1822-1875), "Even Me" by Wm. B. Bradbury, "God be with You" by Tomer (1833-1896) and others. It may be that presently this folk-song music will again initiate a new school of hymn tunes fitting the needs of coming generations, of which Sherwin's "Chautauqua" and "Bread of Life" are the precursors.

9. The Characteristics of the American Tune

(*a*) *The American Tune is Democratic.* Like its Nonconformist English prototype, the American tune is not ecclesiastical in style, nor born in an organ loft under the fingers of an organist. It is a people's tune. Its composers were not academic professionals (sometimes so much the worse), but representatives of the native musical impulses of the people. In other words, these tunes are folk-songs with all their merits and demerits.

(*b*) *They are Varied in Style.* While the ecclesiastical tunes are cast in one mould, syllabic, common time, progressions of radical chords, the American tune has variety in rhythm, time and harmony. We find 3/2, 3/4, 6/8 tunes with the measures broken into notes of different lengths. Some tunes are more or less syllabic; others have slurred notes and but slightly varying harmonies.

(*c*) *Expressive of All Religious Emotions.* Instead of expressing exclusively worshipful reverence and awe, the American tune voices the whole gamut of feelings and sentiments associated with religion. It is stately, it is tender, it is inspiring. It is adapted to many practical needs of the Church in its varied activities outside of the regular service of worship.

(*d*) *The Practicability of the American Tune.* Born of actual vocal exercise, passed through the fire of actual use under conditions which eliminated thousands of inefficient, unattractive and impracticable tunes, what survives is eminently practicable under the varying conditions of church life, not only in America but elsewhere. The vernacular hymnals issued by missionaries all over the world are filled with these tunes.

(*e*) *The American Tune is Tuneful.* The tunefulness of the American music is one of its most striking characteristics. These tunes have individuality; they are

rememberable. They are pleasing and attractive in their marked design and remarkably grateful in the natural sequence of nervous impression. The spontaneity and grip upon the minds and hearts of the people they manifest argue a vitality that will cause them to live through coming generations.

REVIEW QUESTIONS

1. Describe the transition from metrical psalms to hymns.
2. How did the reaction to the Billings school of tunes manifest itself? How was it strengthened?
3. What was the practical value of Billings' style of music?
4. Besides furnishing new material, what was its chief contribution?
5. Describe the development of Musical Conventions and name the chief leaders in the movement.
6. What was the chief cause of their decadence?
7. What was the chief work of Thomas Hastings?
8. Give the names of his chief hymn tunes and designate his surviving hymns.
9. How was Lowell Mason led into a musical career?
10. In what lines was he active?
11. What were his strength and limitations?
12. What was Mason's contribution to church music in Great Britain and elsewhere?
13. Who were the chief associates and followers of Mason?
14. Why did the hymn-tune writing epoch close with Bradbury?
15. Why did English hymn tunes displace the American in our leading hymnals?
16. What were the chief characteristics of the American hymn tune?

XXIV

THE AMERICAN SPIRITUAL

Class Room Suggestions: It will be wise to have a few of the more characteristic "spirituals" sung by the class in a somewhat stentorian and spirited way. "I Can't Stay Any Longer" and "Save Almighty Lord" will be found quite typical specimens. A public concert before the seminary consisting of the "spirituals" furnished herewith will create interest.

Supplementary Reading: A. S. Jenks, "Devotional Melodies," Philadelphia, 1859. Musical arrangements made by William J. Kirkpatrick. Joseph Hillman, "The Revivalist," Troy, New York, 1868. Musical arrangements made by L. Hartsough. The above books are the fullest collections of these old time melodies. Both are rare, but the latter may be picked up in second-hand book stores occasionally.

1. The Rise of the American Spiritual

In swiftly outlining the history of American church music the claims for recognition of the American Spiritual should not be overlooked. While the Presbyterians of New York and Pennsylvania and other states, and the Congregationalists of New England were singing their fugue tunes, minor as well as major, and while the movement for a more sensible church music under the leadership of Lowell Mason was transforming and vitalizing the congregational song of the Atlantic Coast churches, the evangelistic denominations,—the Baptists, the Methodists, the United Brethren (not Moravians) and other aggressively missionary denominations in the Middle and Southern States—were developing an entirely new type of music.

They were working under an entirely different set of circumstances and under different conditions from the established churches in the older communities. They entered regions without religious life, with very little culture and education. The staid, solemn, often lugubrious tunes of the older regions would find no appeal, even if they had been known by the people they wished to reach.

On the basis of the old Scottish and English folk-songs that still survived, and by the help of the current American popular songs, they developed a unique music that exactly fitted their needs.

They did this under the same impulses that led the early Church to adopt the Grecian melodies, the mediæval composer to borrow his *cantus firmus* from secular songs, Luther and his contemporaries, Calvin, Knox, Bourgeois, Tallis, to draw on the secular sources which furnished so many of their melodies.

Lowell Mason and Thomas Hastings and their associates wrote rather simple tunes for the at best poorly trained churches whom they tried to serve, but, after all, their conception of church music was purely worshipful and stressed the Pauline injunction, "Let everything be done decently and in order." The evangelistic denominations sang these tunes, but also the "folk-song" hymn tunes and "camp-meeting ditties," scorned by the more formal churches with a strength of feeling not lessened by denominational prejudice and pride.

2. Body of "Spirituals" Lost

Unfortunately very few of these "spirituals" were ever written out and published, and fewer still have survived the utter transformation of conditions during the

last fifty years. Then there has been an attitude of deprecation towards them on the part of the churches like that of educated coloured people towards the Jubilee songs.

This attitude is all the more unfortunate, because it is everywhere recognized that the melodies that arise among the people, and are adopted by them more or less permanently, have a vitality and genuineness lacking in more ornate or studied music. Thibaut says, "All the melodies that spring from the people, or are retained by them as favourites, are generally chaste, and simple in nature like a child's."

These "spirituals" are genuine "folk-songs" originated and loved by the stratum in our American social life analogous to the peasants of Europe. The great danger is that nearly all record of a very interesting, if not intrinsically valuable, product of the American musical church life will be lost.

In England, Ireland, Scotland and among the various peoples of the Continent their old folk-songs have been gathered up with great industry and pains. Even in our own country people are devoting their lives to the securing of the savage strains of the surviving aborigines. Why should not this unique music of our American forefathers meet with equal interest?

3. Negro Melodies an Outgrowth

The almost amusing result of this obscurity is the credit given to the negro race of the South for this class of music. The Jubilee songs, in so far as they have had their origin among the coloured people, are the direct offspring of the white man's "spiritual." Indeed many of the songs sung by them are "spirituals" borrowed from

their white brethren, the rhythmical swing being somewhat emphasized. The themes of Dvorak's American Symphony are not Negro, therefore, but Caucasian, and the result more directly American than Dvorak himself knew.

Foster, Hanby, and other popular song writers of the middle of the nineteenth century did not get their inspiration from the slaves, as has been stated on high authority, but from these "spirituals." A collection of the words of "spirituals" was compiled by William Hanby, the father of B. R. Hanby, the author of "Darling Nellie Gray."

The negroes were simply imitators, even in the minor strains that have been pathetically characterized as the cry of the sorrows of their captivity. Just as the Gypsy music in Europe differs in the different nations, having no common basis and yet striking characteristics in each, so Negro music imitates the music of the whites wherever the races come in contact, adding a negroid touch of rhythm or foreign tone in every case. This is true in Jamaica, in the Barbadoes, in Sierra Leone, as well as in our own Southern States.

4. The Number of "Spirituals" Large

The number of these "spirituals" was large. One collection of words was published in Philadelphia in 1858, containing over three hundred choruses alone. Different denominations and states had repertoires of their own, so that there is reason to believe there were thousands of them.

5. The Origin and Spread of Individual Songs

Some preacher or local leader had an inspiration in the

furnace heat of a revival meeting and produced a new chorus that was connected with an old hymn. If it struck fire, it was carried to the next camp-meeting, or caught up by the itinerant or presiding elder who sang it wherever he went and so it was widely introduced. As it was thus orally transmitted, little changes were often made in the melody until it met the needs of the popular consciousness. It then had its little day of use and finally dropped out, being replaced by a new one.

6. Origin of the Style

There can be little doubt that the style of these "spirituals" originated in the old Scottish songs and English ballads brought over by the colonists, some of which survive back in the mountains of the Appalachian range. Many of them are decidedly Scotch in their absence of the seventh of the scale and the emphasis of the sixth. It is equally certain that later some of them were brought over from England by Methodist immigrants from Asbury onward. But there is nothing Scotch or English in the rhythmical momentum of these old choruses. That is characteristically American. Many of them adopted the tunes and parodied the words of American popular songs.

Indeed the introduction of the large collection alluded to above urges "the salutary tendency of an attempt to redeem our best popular airs by adapting them to the songs of Zion." The editor also quotes with approval "the language of an old divine, 'Why, there are only seven or eight notes to all the tunes in the world, and they all belong to Jesus Christ; so that if the devil wants any fresh ones, he must make them.'"

7. Characteristics of the "Spiritual"

(*a*) *Some were Ballads.* Some of these "spirituals"

are sacred ballads and were sung by the preachers as solos. An itinerant who could sing solos was assured a double welcome and a double harvest of souls.[1] There were a good many grace notes and slurred passing notes in their solos that it would be difficult to reproduce on a staff. They were frequently narratives of personal experience:

> "Ye people, that wonder at me and my ways,
> And oft with astonishment on me do gaze,
> Come, lend your attention, and I will relate
> My past exercises and my present state,"

and so on through eight stanzas.

Another favourite was entitled "Christ in the Garden." It is a commingling of a description of Gethsemane and of the singer's conversion. The style of the twelve stanzas may be judged from the two which follow:

Christ in the Garden

> "While nature was sinking in stillness to rest,
> The last beams of daylight shone dim in the west;
> O'er fields by the moonlight, my wandering feet
> Then led me to muse in some lonely retreat.

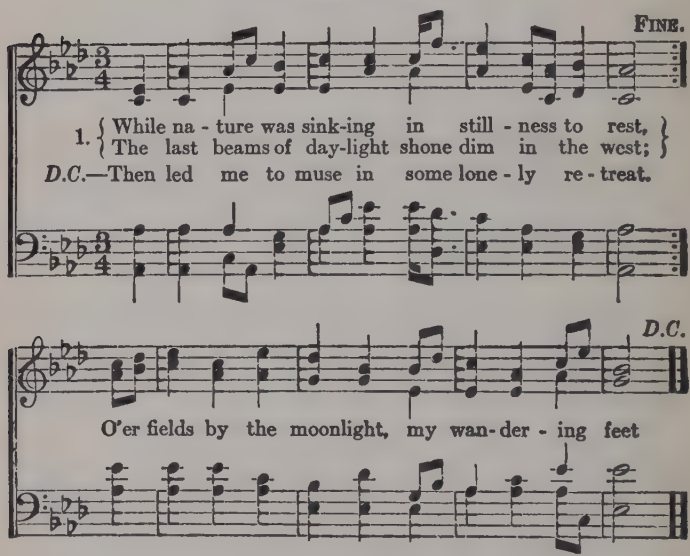
> "While passing a garden, I paused then to hear
> A voice, faint and plaintive, from one who was there;
> The voice of the suff'rer affected my heart,
> In agony pleading the poor sinner's part,"

and so on for ten stanzas more.

[1] The father of Prof. D. B. Towner, so long the head of the musical department of Moody Bible Institute, was known as "The Singing Parson."

The melody here given is characteristic of the major melodies then in use, but is possibly from a secular source, rather than of genuine "spiritual" origin. There was a minor setting, infinitely more pathetic and sad, full of slurrings and quaverings, but memory fails to reproduce it and it does not appear in the few collections accessible.

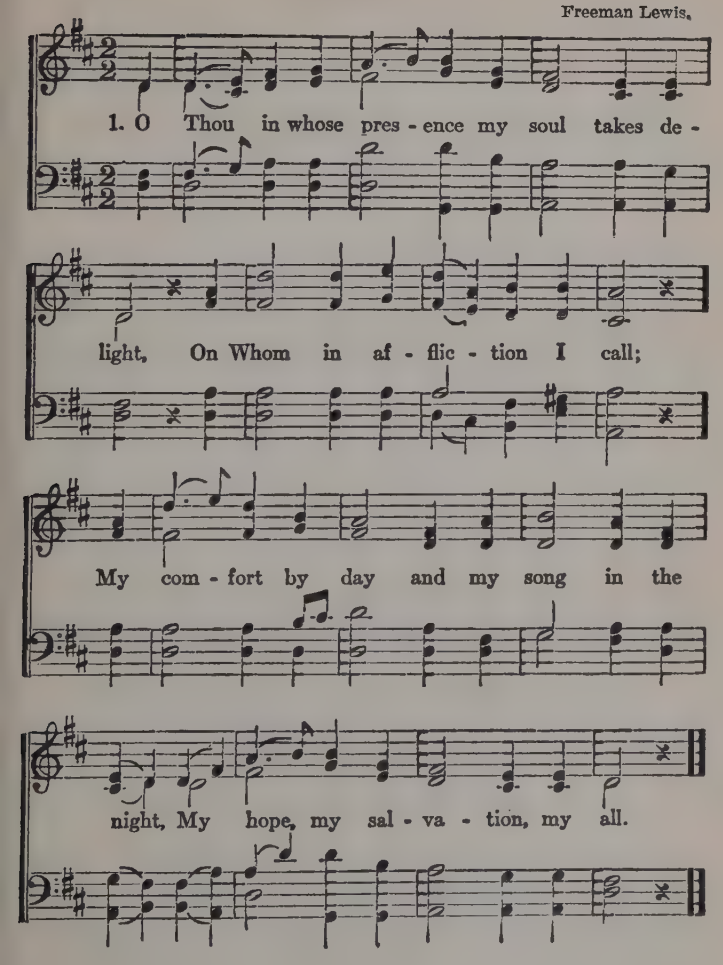
IN THE GARDEN



(*b*) *Spiritual Hymn Tunes.* There were hymns without choruses, but with typically "spiritual" tunes. The following is one of the few whose writer and composer are known, but none the less it is a folk-song of unusual merit. It is almost a pity that its type of piety no longer finds a response in our own modern churches!

MY BELOVED

Freeman Lewis.



Here is another "spiritual" tune which has been properly displaced by "Portuguese Hymn," but which is so good that its death and burial are to be lamented.

FOUNDATION

How firm a foun - da - tion, ye saints of the Lord,

Is laid for your faith in His ex - cel - lent word!

D.S.—You who un - to Je - sus for ref - uge have fled?

What more can He say than to you He hath said,

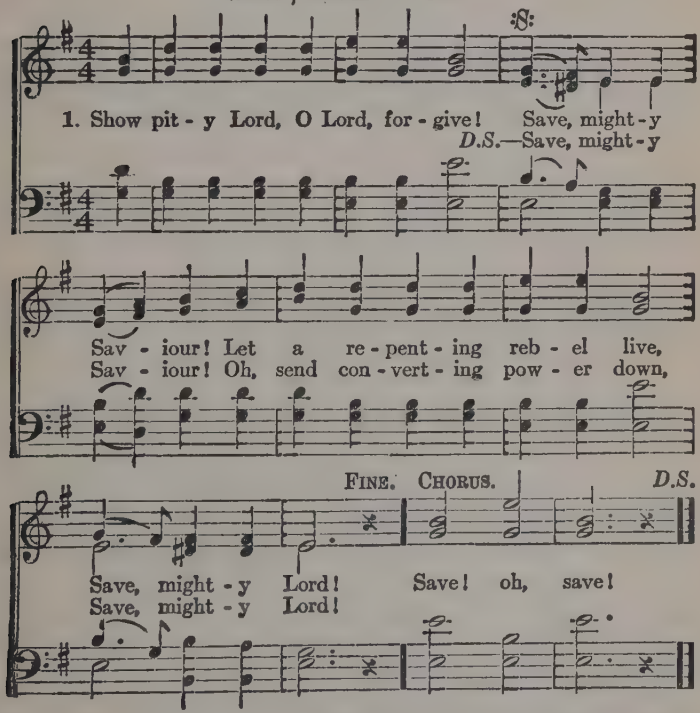
Other still popular tunes of "spiritual" origin are "Loving Kindness" and "Fountain."

(*c*) *"Spirituals" with Verse and Chorus.* A more common form of these "spirituals" was a verse and a chorus. Sometimes a standard hymn had a new tune and a corresponding chorus given it. "Jesus, my All, to heaven is gone," and "Come, Thou Fount of every blessing," were particular favourites. The tune of the stanza

and that of the chorus were frequently the same, except that the rhythm of the chorus was made more pronounced by giving more syllables to the line.

Then there were "spirituals" like "Palms of Victory," which is even yet used in many churches, in which there was an original hymn with its appropriate refrain. A more common form was the interlinear refrain. Here is an example that must have had extraordinary effectiveness.

SAVE, MIGHTY LORD



Less than forty years ago the following "spiritual" was still sung spontaneously in Southern Ohio. It has the genuine pentatonal characteristics which mark aboriginal

music elsewhere when it follows a definite scale. The effect of it was very powerful. It had great dignity as well as force.

I CAN'T STAY AWAY

I can't stay an - y long - er, I can't stay a - way!

FINE.

The Gos - pel ship is sail - ing by, I can't stay a - way?

Je - sus, my All, to heav'n is gone, I can't stay a - way!

D.C.

He whom I fixed my hopes up - on, I can't stay a - way!

(*d*) *The Use of the Pentatonic Scale.* As has already been stated, in many of these "spirituals" the sixth note of the scale has a predominance that gives a weird effect

to what is otherwise a major melody. As good an example as any is the chorus,

I WILL ARISE

1. Come, ye sin - ners, poor and need - y,
CHORUS.—I will a - rise and go to Je - sus,

Weak and wounded, sick and sore, Je - sus' read - y
He will embrace me in His arms; In the arms of

D.C. for Chorus.

stands to save you, Full of pit - y, love and pow'r.
my dear Sav-iour, Oh, there are ten - thou-sand charms.

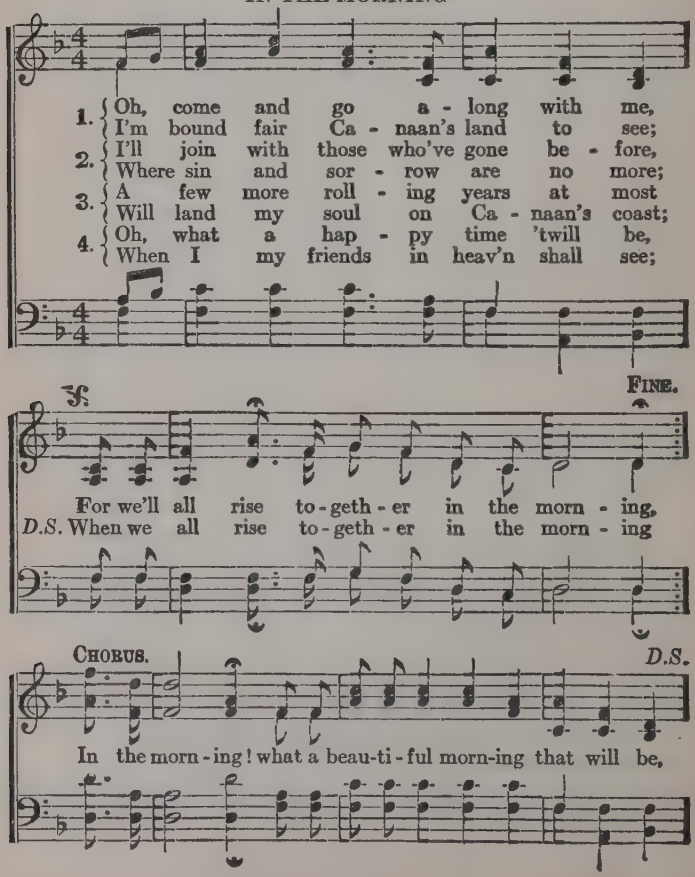
Hundreds of thousands of persons have walked to the "mourner's bench" while the church was singing this urgent and almost hypnotic appeal, for it was very widely and frequently used.

(*e*) *The Minor Element in "Spiritual Songs."* Plain minor tunes are plentiful, as they are in both the New England and English hymnody. Probably investigation would show that many of them came from these sources. The minor chorus is also very frequent. The minor scale

used was sometimes the harmonic, and sometimes what may be called the natural—*i. e.*, without accidentals—never the melodic.

The most common, perhaps, was a mingling of minor and major phrases, the hymn line being major, the interlinear refrain minor, and the succeeding full chorus combining both. The seventh of the minor scale sometimes was sharped, but usually not. A very excellent specimen is the following:

IN THE MORNING



8. "Spirituals" Good Church Music Because Efficient

The appeal to the nerves of many of these old "spirituals" was something extraordinary among a people hidden away among the mountains and valleys of the great Appalachian range. This music suited the people among whom it was produced and sung. It effected the results religious music is intended to secure and hence was good church music, poor as it may appear from an artistic standpoint. Even from that standpoint it has some claim on our attention as the unique product of a unique age.

9. Influence on Succeeding Movements

Not the least element of importance in the "Spirituals" was its influence upon the succeeding Sunday-school Song and the Gospel Song. While the hymn tune of Lowell Mason and his associates had its influence, both forms of popular sacred music rooted deep in the "spiritual," as we shall see in later chapters. Without its simplicity of harmony, marked tunefulness, and attractive rhythms, the later music would not have had the world-wide appeal and the religious efficiency it has so signally demonstrated.

REVIEW QUESTIONS

1. From what conditions did the American "Spiritual" arise?
2. Why was the great body of this "spiritual" music lost?
3. What is the relation of this music to the Jubilee songs?
4. Why was the number of these "spirituals" so large?
5. How did the individual songs originate and spread?
6. What was their original musical basis?
7. In what different forms did they appear?
8. What scale characterizes many of these "spirituals"?
9. How were the major and minor scales used?
10. In what sense was this music "good" music?
11. What contribution did it make to succeeding styles of music?

XXV

AMERICAN SUNDAY-SCHOOL MUSIC

Supplementary Reading: Hall, "Gospel Song and Hymn Writers," Revell, N. Y.; Curwen, "Studies in Worship Music," Second Series, Art. "The Music of Sunday-Schools," Curwen, London.

THERE were two important reasons for stressing the American Spiritual, unknown though it is to the average American minister: (1) it is too important a phase of pioneer church life to be entirely forgotten; (2) it was the immediate parent of the American Sunday-school Song and of the Gospel Song. Indeed, it may be said to be the original Gospel Song, for in its spirit, in its immediate purpose, in its adaptation to immediate popular religious needs, and largely in its form, it anticipated our modern popular evangelistic music.

1. THE EARLIEST SUNDAY-SCHOOL SONG BOOKS

In the meantime the Sunday-school had taken a more important place in American church life and the need of collection of hymns and music for its use had been felt. As the hymn tunes that were in vogue were accessible in printed form, and as these collections were issued in Atlantic Coast cities, the line of least resistance was to use the hymns in the hymnals appropriate to work among children (and a good many that were not) with the tunes that were usually sung with them.

This probably was the character of Hastings' "Juvenile Psalmody" issued in 1827 and Bradbury's "The Young Choir," 1841, his first venture revised in harmony by Hastings, and his "Sunday-School Melodies," 1856.

While Mason issued many juvenile books, they were for public school use and not for Sunday-school.[1] This in spite of the fact that the Sunday-school became a widely spread "movement" in America as early as 1791.

In 1857 Isaac Baker Woodbury (1819-1859), having helped to edit the Methodist Hymn Book of even date, issued a song book for use in Sunday-schools, calling it, after the fashion of those days, "The Sunday-School Lute." It consisted almost wholly of hymns transferred from the Methodist Hymn Book with tunes gathered from the same source. A very few songs of a more popular cast were included. It showed little adaptation to the needs of young people, much less to those of children.

Two years later, in 1859, William Bradbury (1816-1868) issued the "Oriola," built on very much the same lines as Woodbury's "Lute," except that he supplied a little easy, rhythmical music, such as he had been using in the "Rudiments" prefixed to his singing school books, and a few of the "camp-meeting ditties" or "spirituals"

[1] In the preface of Mason's "Young Minstrel," a book for the public school issued by T. B. Mason in 1839, there is an argument for children's music that is cogent still: "A great mistake has been made by some persons, who seem to think that *good* music is all that is necessary for children, and that they will be as well pleased with 'Old Hundredth' or 'Mear,' or any good psalm tune, as with music of a more simple and cheerful character. And others, fearful that their children will acquire a 'bad taste,' are unwilling to have them sing or play anything but the compositions of Handel, Beethoven, or Weber. If such persons act upon the same principle in teaching their children to read, they would not allow them any books except the works of Milton, Shakespeare, or Homer. And it is quite as reasonable to expect children of nine or ten years to be interested in reading 'Hamlet,' 'Paradise Lost,' or the 'Iliad,' as it is to expect them to be pleased with the choruses and overtures of Handel, Beethoven, or Rossini."

which he had noted and arranged. The plain unrhythmical hymn tune, however, made up the bulk of the book.

2. A New Style of Sunday-School Music

(*a*) *Horace Waters' "Sabbath-School Bell."* But now appeared a new force. In 1859 a piano merchant of New York City, Horace Waters (1812-1893), brought out "The Sunday-School Bell."[2] It was a fairly complete departure from the hymn tune ideal of Sunday-school music, as its preponderating material consisted of arrangements of popular secular melodies, more or less sentimental in character, and of arrangements of "spirituals" gathered up from among the people. The sentimental and stirring rhythmical elements overshadowed the sedater hymn tunes completely.

The book won the approval of the Sunday-school workers of the land despite its literary as well as musical shortcomings. In his preface to "The Sunday-School Bell No. 2" Mr. Waters states: "This was the first popular Sunday-school song book of note that was published." During the next ten years nearly a million copies were sold.

It cannot be said that Waters created a new style of Sunday-school music. He wrote no new music. He

[2] Mr. Waters, although a business man, was a very devout and religiously aggressive man. He was a great believer in the Sunday-school and made addresses and sang solos in Sunday-schools as opportunity was afforded. He had a fine impressive appearance and was a widely influential and useful man. His book, therefore, was not so much a business venture as an outgrowth of his religious work. In later years he was greatly interested in the Freedmen, founding a school for them in North Carolina. He was also an ardent propagandist for Prohibition by song and address. The piano business he founded is still in existence on Fifth Avenue, New York City.

simply compiled the already existing secular and religious folk-song and had it arranged for Sunday-school use.

(*b*) *Progress of the New Style Under Bradbury.* Holding singing school conventions all over this land, Bradbury was in a position to realize that Waters' series was better adapted to the tastes and needs of Sunday-schools than his "Oriola." When he issued his "Golden Chain" in 1861, Bradbury took from Waters' book only the suggestion that what the Sunday-school wanted was more lively and emotional music than the current hymn tune supplied, and he wrote new songs that would meet this need.

He was an advanced student in music, having spent two years in England and Germany under leading teachers, but he was able to write all grades of music from the primary song, "Jesus Loves Me, This I Know" to the extensive anthem.

His "Golden Chain" was more widely approved than had been Waters' "Bell." Bradbury had a better literary taste, although some of the hymns he used left very much to be desired; he was a composer of merit and his new songs had no secular associations, while they were popular in style. "The Golden Chain" sold by the hundred thousand. The next year he issued "The Golden Shower" which again had an enthusiastic welcome. In 1863 he revised both books, adding much new material. In 1864 "The Golden Censer" appeared, and in 1866 a combined edition of all three. In 1868, just before his death, he issued "Fresh Laurels" which was a distinct advance upon his previous books in literary and musical merit.

Bradbury not only used "spirituals" freely, but wrote a number of songs in the same form and style, but always in the major keys.

It should be said that Bradbury's books contained many dignified hymns, thoughtful and devout, but not always adapted to use among young people and children. Out of 194 hymns in "The New Golden Chain" 43 or over one-fifth were about heaven or the dreariness of this world.

When we analyze the music we find that out of 151 melodies only 44 are in the hymn tune style and of these only 26 survive. While the Bradbury music was much better on the average than the Waters', it is still very shallow and inexpressive, as compared with that found in present Sunday-school hymnals of a popular type.

(*c*) *Imitators of Waters and Bradbury.* The success of Waters and Bradbury very naturally led others to enter the field. Philip Phillips, "The Singing Pilgrim," the prototype of Sankey and McGranahan and an army of other singing evangelists, issued a number of books,[1] of which perhaps his "Singing Pilgrim" had the widest use. Tullius C. O'Kane issued quite a series, as did Asa Hull, Theodore E. Perkins, and others.

(*d*) *Further Development of Bradbury's Work.* After the death of Bradbury his business passed into the hands of the firm, Biglow and Main. They secured the coöperation of Rev. Robert Lowry (1826-1899), a Baptist Minister; Lowry's "Gather at the River" had come into universal use. He had been associated with S. J. Vail in the preparation of "Chapel Melodies" (1868), issued by the same house, and with Wm. F. Sherwin and Chester G. Allen in "Bright Jewels" (1869). The latter had a wide sale, over 300,000 copies being sold in less than two years.

In 1871 this firm published "Pure Gold" by Mr.

[1] "Early Blossoms" (1862), "Spring Blossoms" (1864), "Musical Leaves" (1866).

Lowry and W. Howard Doane (1832-1918), a Baptist Sunday-school superintendent and prominent manufacturer of Cincinnati, Ohio, whose "Little Sunbeam" and "Silver Spray" had had a phenomenal sale. This book was superior in literary and musical value to anything that had appeared before, which the Sunday-school public was quick to see, and it absorbed over a million copies. It was, like "Bright Jewels," an entire departure from the old hymn tunes and the church hymn; instead, it had a rhythmical freshness and variety and a vigour beyond any collection issued before. Subsequent books by the same composers, "Royal Diadem," "Better than Gold," etc., were well received, but by no means swept the field as "Pure Gold" had done.

The monopoly of the popular church music by the Gospel Song books which began to be issued in 1875, as we shall see, rather limited the further sales of this series of Sunday-school song books.

The combination of these two composers was a very happy one. Dr. Lowry, with adequate literary training, made a good editor. His music was easy and popular, but apt to be thoughtful and sedate. While he commanded the rhythmical swing of the livelier spirituals, he rather inclined to more conservative rhythms. Dr. Doane, on the other hand, was an extraordinarily energetic business man who put the same energy into his religious and musical work. His music, therefore, shows more of the Western emphasis of rhythm and movement, although as a tender, emotional man, he sometimes displayed considerable pathos. "I Need Thee Every Hour" by Lowry and "Rescue the Perishing" by Doane typify the music of the two writers.

In general, the music of both men was eminently vocal and practicable; in other words it was singable. Their

range of chords was limited, both naturally and consciously, and, for the purpose they intended it, all the better for the limitation. Not approaching composition by way of the piano or organ, they never exceeded the range of average voices. Their music had more expressiveness than Bradbury's and was more devout; there was no background of the singing-school, as in Bradbury's work.

These books by Lowry and Doane excelled those of Bradbury in literary excellence, having the fuller coöperation on the texts of Fanny Crosby, who had only occasionally contributed to Bradbury's books. Moreover, both men approached the work, not as professional musicians, but as Christian workers. Dr. Lowry was a professor in the University of Lewisburg and afterwards entered the active ministry. Dr. Doane was a layman, but superintendent of an exceedingly large and flourishing Sunday-school and prominent in Young Men's Christian Association work at a time when its spiritual mission was emphasized more exclusively than it is now. They naturally laid more stress upon the hymns they used, and their prominence gave them access to the writers of sacred verse. The widespread use of their books stimulated a larger circle of writers in giving expression to their devout feelings and thoughts in the less formal verse adapted to Sunday-school use. There was therefore a more devotional and a more definitely evangelistic element in these books which later should supply a large part of the best materials for the series of "Gospel Hymns."

(*e*) *The Music of Sweney and Kirkpatrick.* But Lowry and Doane were not the only active forces in the field. Waters and Bradbury had been attracted by the lively, rhythmical side of the "spirituals" as they had the young

people and children in mind. A movement entirely independent of that of Bradbury, Lowry, and Doane, which (though Bradbury was a Methodist, at his death fell into exclusively Baptist hands) grew out of the more devout side of the "Spiritual" among the Methodists of Pennsylvania and New Jersey, and had its center at Philadelphia and Ocean Grove, where a great camp-meeting was and is annually held. The pioneers of this movement were Rev. J. H. Stockton, W. G. Fischer, and especially William J. Kirkpatrick, who as a mere boy had arranged and harmonized a large number of current "Spirituals," as we have already seen. Their activities at first belong to the history of the Gospel Song where they will be detailed more fully.

The needs of the Ocean Grove Camp-meeting finally led to the issue by John R. Sweney (1837-1899), the musical director of the Pennsylvania Military Institute, who had charge of the camp-meeting music, first of "Gems of Praise" (1873) and of "Goodly Pearls" (1875), of which John J. Hood was associate editor and publisher. In 1878 Mr. Sweney and Wm. J. Kirkpatrick (1838–1921) united in "The Garner," in 1880 in "The Quiver," and from year to year until Mr. Sweney's death in a long series of books for whose names space is lacking.

Mr. Sweney was a commanding personality, and made a most admirable and successful leader of the song service at Ocean Grove. He was a much better musician than either Lowry or Doane, using a wider range of rhythm and of harmony, but having sometimes a less vocal spontaneity. He was quite original and fertile of mind and his music shows considerable diversity of style. His "Beulah Land" and "Sunshine in my Soul" are typical of his more popular music.

His associate, Mr. Kirkpatrick, was a man of quieter and less commanding temperament,—somewhat less of a professional musician and instrumentalist. He was a successful business man for many years and looked upon his musical efforts as an avocation rather than as a vocation. His music is smooth and rhythmical without being mechanical, fairly animated at times, particularly in his Sunday-school songs, but he was at his best in the quieter, devotional style represented by his "'Tis so Sweet to Trust in Jesus."

(*f*) *The Western Development of Sunday-School Music.* The western school of Sunday-school writers whose importance will be more fully dwelt upon in the chapter on "Gospel Song," took another and independent line under the leadership of George F. Root. He had large experience in the singing school convention work and in the writing of easy popular music for his department of rudiments in his books. He had also won the approval of the American people by his war songs which had unexampled popularity. Hence he was in closer touch with the American people at large than perhaps any of the composers already mentioned.

But his first ventures in this field were not very courageous, small paper covered booklets with fanciful names such as The Linnet, The Robin, etc., which were presently gathered up in "Chapel Gems" (1868). They made no great impression. He had associated with him in this book the composer of "Darling Nellie Gray," Rev. B. R. Hanby, who wrote just enough popular religious songs to show how great a loss the American churches suffered in his untimely death. Even yet his Christmas carol, "Who is He?" is a standard in the hymnals of Scotland.

In 1870 appeared Root's "The Prize," which was more worthy of his great melodic talent and was more

widely used. The book has the additional interest that in it appear the first songs by P. P. Bliss.

Root's songs bear the mark of the singing school teacher and the successful popular song writer. There is a lack of devout appeal in his work. With "Varina" and "The Shining Shore" disappeared the last of his hymn tunes. He could write a rattling good tune like "Where are the Reapers?" or "Ring the Bells of Heaven," but there his appeal stopped. Bliss' religious work and probably less matter-of-fact temperament prevented the same limitation, and in his "The Charm" (1871), in which first appeared many of his songs that later found so hearty a response when "Gospel Hymns and Sacred Songs" was issued: "Hold the Fort," "Almost Persuaded," "Jesus Loves Even Me," "Let the Lower Lights be Burning," and others.

(*g*) *Less Prominent Sunday-School Music Composers.* There were, of course, other writers of Sunday-school songs besides those already mentioned. H. R. Palmer, the last of the great convention leaders, had issued a small book entitled "Palmer's Sabbath School Songs" in 1871. It contained "Yield not to Temptation," which has had world-wide use, and several others that were quite popular, but had no general influence. Emerson's "Glad Tidings" still earlier, in 1863, cut even less figure. J. E. Gould, T. E. Perkins, A. J. Abbey, J. R. Murray, Rev. E. A. Hoffman, each issued a series of these books, many of them quite popular, but had no appreciable influence on the character of the Sunday-school Song.

3. A Modern Style of Music

In 1869 William A. Ogden, another successful leader of conventions, issued his "Silver Song" in an entirely different style from any of the foregoing. He was not

particularly religious, not to say devout. He had a very lively, aggressive spirit and he may be said to have originated the dotted eighth and sixteenth (♪.𝅘𝅥𝅯) style of Sunday-school Song which Sankey imitated in his "When the Mists have Rolled Away" and which characterizes J. M. Black's more recent popular gospel song, "When the Roll is Called up Yonder."

His book, backed by an extraordinarily energetic and resourceful publisher, W. W. Whitney, had an immense vogue, probably over a million copies being sold. It was reprinted in England where over half a million copies were disposed of. Despite the fact that Ogden wrote in his later years many Sunday-school and gospel songs of real value (such as "Look and Live," "Bring Them in," etc.), his later books had a greatly diminished sale.

He is notable chiefly for having brought to the front, if he did not originate it, a style of rhythm that was imitated by lesser composers and so led to a degradation of this form of church music to a merely mechanical, soulless rhythmic clatter with little melody in it.

4. The Effect of the Gospel Song

The sudden rise of the Gospel Song in 1875 through the world-wide effect of the Moody-Sankey evangelistic campaigns made a great change in the Sunday-school Song situation. It narrowed the field, because many of the Sunday-schools adopted "Gospel Hymns" for their work. It led to the making of general purpose song books which should meet the needs of devotional meetings, evening services, evangelistic campaigns as well as of Sunday-schools.

The series of "Gospel Hymns Nos. 1-6" held the field, because of the Moody-Sankey influence, because they

could command through their associated evangelists and singers the best material, because of the rigid exclusion under the copyright laws of any other editors and publishers from the use of the popular songs the combination controlled. During this period appeared the Sunday-school song books of J. H. Fillmore, Chas. H. Gabriel, E. S. Lorenz and Isaiah Baltzell, J. H. Kurzenknabe, George C. Hugg, and many lesser lights, some of which were very popular and had large sales.

5. The Super-Modern Style of Sunday-School Music

Hitherto, while there had been divergencies of personal style, the general type was the same. It was regular four-part music, with only an occasional solo or subrefrain in the stanza. In 1893 there suddenly appeared by way of the festival services, a unisonal style of melody with an instrumental accompaniment and with antiphonal passages for boys and men and for girls and women. The Hall-Mack Company of Philadelphia and The Tullar-Meredith Company of New York were the original representatives of this new style. It first was used in Christmas, Easter and other festival services, but met with such favour there that books in the same style appeared.

They appealed particularly to the larger city Sunday-schools where there were pianos and other instruments. The melodies themselves were rather dignified and by no means as rhythmical as many of those of older songs, but the instrumental accompaniment supplied that want in full measure. It was piano music and the churches were filled with pianos and every schoolgirl could play them.

This music was excellent for festival purposes or for hymns of inspiration or exhortation, but had no voice

for the tenderer and quieter religious emotions. Mr. J. Lincoln Hall and I. H. Meredith have done excellent work in this style, as have also Adam Geibel, and Ira B. Wilson. There are quite a number of other composers who have succeeded well in this style. Its limitations have been realized of late and there is a noticeable return to the four-part harmony.

6. American Sunday-School Music Abroad

Not only was Mason's reform in church tunes largely adopted in Nonconformist churches in England, but the more popular Sunday-school Song as well. It even found entrance to many of the hymnals for church use. As New England reprinted the English psalm tunes of Playford, Tansur, Williams and Gardiner, so England and Scotland reprinted American hymn tunes and Sunday-school songs.[4] It set the English composers to writing music for Sunday-schools and furnished the models. Even the more recent super-modern style has had imitators during the last two decades. The exploiting of these songs in Sunday-school work in missionary fields is noteworthy, little else being used.

REVIEW QUESTIONS

1. Why was the "spiritual" discussed in previous chapter?
2. What was the character of the earliest Sunday-school song books?
3. Who instituted a new style of Sunday-school music?
4. What were the sources of the music? What were its characteristics?

[4] Some years ago a Scottish song book fell into the writer's hands and he was amazed to find that all its contents was taken from American sources and a large share from one of his own books! No credit was given to sources or to American composers.

5. Who developed the new style and what books did he issue?

6. In what respects did he follow up the ideas of Waters?

7. In what respects were Bradbury's books superior to those of Waters?

8. Give the names of other composers who entered this field.

9. By whom was the work of Bradbury continued?

10. In what respects were the books of Lowry and Doane superior to those of Bradbury?

11. What independent line of development centered at Ocean Grove Camp-meeting?

12. Give the characteristics of Sweney and of Kirkpatrick.

13. Who was the leader of the Western Sunday-school music?

14. Who were his leading associates?

15. What new style did Ogden originate and what were its ultimate effects?

16. What effect had the Moody and Sankey Gospel Song campaign on Sunday-school music?

17. What writers were prominent during this period?

18. What characterized the super-modern style of Sunday-school music?

19. What acceptance did this American Sunday-school music find abroad and what was its effect?

XXVI

THE GOSPEL SONG

Supplementary Reading: Benson, "The English Hymn," pp. 482-492, Doran, N. Y.; Sankey, "My Life and the Story of the Gospel Hymns," Sunday School Times, Phila.; Hall, "Gospel Song and Hymn Writers," Revell, N. Y.; "Memoirs of George C. Stebbins," in "The Choir Leader," Lorenz Publishing Co., Dayton, Ohio.

We have seen that the Sunday-school song is a hybrid produced by crossing the "spiritual" with the American hymn tune. It had the harmonies and the major scale of the latter with the freedom, the vigour and in part the form of the sacred folk-song. The Gospel Song while affected by the same influences that produced the American hymn tune, was the direct outgrowth of the "spiritual."

1. The Essential Points of the Gospel Song

What is a gospel song? It is a sacred folk song free in form, emotional in character, devout in attitude, evangelistic in purpose and spirit. The music is people's music, simple, singable, appealing. The hymns are more or less subjective in their matter and develop a single thought rather than a line of thought. That thought usually finds its supreme expression in the chorus or refrain which binds the stanzas together into a very close unity, just as it does in lyrical poetry where it is occasionally used.[1]

[1] The refrain and chorus are spontaneous forms used wherever songs are written,—in the Hebrew psalms, in the songs of the Troubadours, in the boat songs in the heart of Africa, or in the

2. The Gospel Song's Inheritance from the "Spiritual"

As has been said, the "spiritual" was the original Gospel Song. It was born amid evangelistic campaigns and in a revival atmosphere. Under the influence of current secular song, of the introduction of organs and pianos, and of the wider use of American hymn tunes, it changed its minor and pentatonic scales, into the major scale and its unison into four-part music. What it took the Christian Church a thousand years to do was done here in half a generation. The parallel is really remarkable. But its devoutness and consciousness of the divine presence and blessing—its subjectiveness—remained. Its single-hearted devotion to all efforts to win sinners and formal Christians to a "conscious salvation" was the same. Its appeal to popular feeling and instinct continued.

The gathering up of the words of spirituals in leaflets, booklets, and books, finally culminated in two collections, containing the melodies as well, one in 1859 compiled by A. S. Jenks and arranged and harmonized by William J. Kirkpatrick, later so prominent in the editing of gospel song books, and the other, "The Revivalist," issued in 1867 by Joseph Hillman with "spirituals" arranged by Louis Hartsough, whose "I hear Thy welcome voice" is a classic and has been sung around the world.

They were typical gospel song books in purpose and in adaptation to evangelistic work and to devotional meet-

rude formless cries of the medicine men or witch doctors among the American Indians. To decry their use in Sunday-school and gospel songs is to plead guilty to ignorance of fundamental lyrical impulses of the human mind. However, that they are used too frequently and too mechanically cannot be gainsaid.

ings. They mark the transition, not only by the four-part harmony supplied to the spirituals, by the shearing off of the ornamental quaverings and slides, in which especially soloists had indulged, and by the changing of the melodies where they were independent of a harmonic basis and indulged in tones that could not be harmonized—just as the mediæval composers treated the discant they borrowed from secular songs,—but also by bringing new songs of a distinctly modern Gospel Song type. They were written chiefly by Methodist preachers of an ultra-evangelistic turn.

3. The Originators of the Gospel Song

(*a*) *The Methodist Writers of Philadelphia.* In the years following the issue of these two collections, Rev. J. H. Stockton, Mr. Kirkpatrick, William G. Fischer and others were sending out little booklets, containing distinctly gospel songs, for use in the camp-meetings, held in various parts of Pennsylvania, New Jersey, Delaware and Maryland.

Some of our classic gospel songs appeared in these collections: Stockton's "Only Trust Him," "The Precious Blood" and "The Great Physician," Fischer's "I am Coming to the Cross" and "I Love to Tell the Story," Grape's "Jesus Paid it All," Kirkpatrick's "Jesus Saves."

(*b*) *Philip Phillips.* During this time "The Singing Pilgrim," Philip Phillips, had been issuing books containing not only some spirituals and more gospel songs such as his "The Beautiful Land," but also the sacred solos he sang everywhere, including "My Mission," by S. M. Grannis, which he sang before President Lincoln. In these books appeared O'Kane's "The Home Over There." The musical activities of Phillips were wide

and indefatigable. He sang his solos in camp and hospital, in conventions and churches, for Y. M. C. A. and Christian Commission, as opportunity offered.[2] Not the least contribution to the preparation of the Moody and Sankey campaign in England was Phillips' introduction of the new American Sunday-school and gospel music, personally and by the publication of a very widely used book, "The American Sacred Songster." Phillips' later "Hallowed Songs" was a typical "Gospel Song" book, being used by Sankey in the beginning of his evangelistic singing with Moody in England.

There had been a great number of devotional song books published up to this time by denominational publishing houses and private individuals. They were, in general, combinations of standard hymns with some gospel songs and spirituals. Asa Hull, S. J. Vail, and others were active in this devotional line, but the books had no influence upon the general course of Gospel Song history.

(*c*) *W. Howard Doane.* In 1870 W. H. Doane issued "Devotional Songs" for use in Y. M .C. A. religious and evangelistic work. In it he gathered the distinctly devotional and evangelistic songs which had been appearing in the Sunday-school song books Bradbury and Lowry and he had been preparing, besides some new ones, including the classics, "Pass Me Not" and "Rescue the

[2] To make the Y. M. C. A. movement in the "sixties," with its activities among the soldiers and sailors on land and sea, the mainspring of the development of the Gospel Song as does Dr. Benson, is to take one of the effects of the new musical impulse for its cause. The Y. M. C. A. does not originate; it uses with matchless skill what resources it finds to hand. Of course, it coöperated with other influences in introducing the new popular sacred song.

Perishing." It had a large proportion of plain hymn tunes, perhaps half, and hence was typical of later popular hymnals rather than of subsequent collections of gospel songs.

(*d*) *Chaplain C. C. McCabe.* In 1872, Chaplain, later Bishop, McCabe, who had been doing a good deal of singing in his evangelistic and other tours, compiled the best gospel songs extant in the East, particularly in the books of Bradbury and Lowry and Doane, in his "Winnowed Hymns," a very useful book that had a very wide sale. This was a definitely Gospel Song collection.

(*e*) *P. P. Bliss.* In 1874, P. P. Bliss, who at this time had joined Major Whittle as singing evangelist, published his "Gospel Songs" which contained a number of very effective things, originally appearing in Root's and Bliss' Sunday-school books. The fact of Bliss' use of this title for his previous book shut it out from consideration when "Gospel Hymns" was christened.

(*f*) *Ira D. Sankey.* It will thus be seen that Sankey did not originate the Gospel Song during his first campaign in England, as is often stated. The English people had been using Bradbury's and Root's tunes and Sunday-school songs before Sankey's time. These evangelistic and devotional songs by Lowry, Doane, Bliss and others were new to them. Their segregation from the other American music brought out the inherent type, and the English very happily named them Gospel Songs.

Sankey's own contributions were negligible until sometime later. He never became a full-fledged composer. He furnished a crude outline of a melody and Hubert P. Main, musical editor of Biglow and Main's publications and subsequently of many church hymnals, did the rest.

As it was, the Moody and Sankey movement entered a rich heritage that in the providence of God had been

preparing for half a century, all ready made for the use of their work.

4. The Origin of the "Gospel Hymns" Series

(*a*) *The Editorial Combination.* In England Sankey could make his rapidly appearing booklets of "Sacred Songs and Solos" unhampered by American copyright and finally gather them up in a book, but when he came back to the United States, he could not do so. As P. P. Bliss with Major Whittle belonged to Moody's great evangelistic corps, and was a competent composer and musical editor, it was decided that he should become the senior editor and Sankey the associate in the making of an evangelistic song book suitable for the whole force doing evangelistic work under Moody's auspices.

As The John Church Co. had inherited Bliss from the firm of Root and Cady of Chicago after the great Chicago fire, this brought together the copyright resources of Biglow and Main and The John Church Co., the two largest publishers of popular sacred music in the land. The result of the union of editorial and publishing forces was "Gospel Hymns," into which was gathered the very choicest gospel songs written in America during the previous fifteen years.

(*b*) *The Wide Sale of "Gospel Hymns."* The sale of this book swept America from ocean to ocean and across the waters to foreign lands. These songs had already won England, now they passed over to the Continent in translations and were widely used in Protestant Europe. Even sedate Germany had its own edition and presently it led to an indigenous Gospel Hymn of its own, favoured by the Nonconformists and the Pietist faction of the State Church. Missionaries all over the world translated the hymns into the language of the peoples for whom they

were working, and so the tide of Gospel Song encircled the globe.

As all the best songs had been gathered into "Gospel Hymns No. 1" only second-rate material was left for "Gospel Hymns No. 2" and the new songs by Bliss and Sankey did not raise the standard sufficiently to repeat the success of "No. 1." The accession of Jas. H. McGranahan and George C. Stebbins added new attractiveness to subsequent numbers and the sale improved somewhat, but never again reached the extraordinary figures of "Gospel Hymns No. 1."

(*c*) *The Change in Style.* As the series progressed, the simplicity of the music of "No. 1" became less conspicuous. Sankey was a leader of singing in public assemblies, not a choral leader. His outstanding concern was to have the people sing. Bliss and McGranahan and others had been convention leaders, where they had great choirs to deal with. Hence the simple melodies like "Hold the Fort," "Rescue the Perishing," "I Need Thee Every Hour," were followed by more elaborate songs with broken time (Not fugues! there never was the faintest trace of fugal work in the songs) and somewhat more varied harmonies.

5. Gospel Songs by Other Writers

It was psychologically inevitable that the old simplicity should be submerged by the conscious effort to write new and better songs, and it showed itself in the songs written by other composers. For after the first submerging, which met the issues of other Gospel Song writers when "Gospel Hymns No. 1" appeared, other Gospel Song writers and publishers took heart again and went on with their work.

The Sweney and Kirkpatrick books, contributing

Sunday-school and gospel songs with perhaps a little more emphasis on the latter appeared annually as before. After Sweney's death Kirkpatrick and Gilmour continued the series. The former also edited a large number for various evangelists and publishing houses.

D. B. Towner in connection with his work as musical director of the Moody Bible Institute issued an excellent series beginning with "The Gospel Pilot Hymnal." He had previously prepared some very popular collections,—"Songs of Free Grace," "Hymns New and Old" Nos. 1 & 2. His "Trust and Obey" and "Anywhere with Jesus" first appeared in these books.

J. Lincoln Hall and Austin R. Miles, later assisted by Adam Geibel, issued a series of combination Gospel Song and Sunday-school Song books published by The Hall-Mack Co., of Philadelphia, containing some popular gospel songs, including "Does Jesus Care?" by Mr. Hall and "Stand up for Jesus," a very effective and widely used setting of the old hymn by Adam Geibel in the modern unison style. Austin R. Miles wrote the very widely used and popular song, "If Jesus Goes With Me." Denominational publishing houses issued their own Gospel Song books, having in mind the needs of their organized young people as well as of the regular devotional and evangelistic phases of church life. The Christian Endeavour and Epworth League organizations also issued books for their young people.

6. The New Evangelistic Campaigns and Their Songs

But all this was running on past momentum and running down. A new evangelistic impulse was needed which finally came with the campaigns of Torrey and

Alexander, 1903, in this country, in England and round the world, and later, those of Chapman and Alexander.

(*a*) *Preparatory Work by Edwin O. Excell.* In unconscious preparation for this great campaign, E. O. Excell, until then a stone mason in northern Ohio, a natural leader of song, with a great voice, began in 1885 in Chicago the publication of a series of Gospel Song books. He was the very successful song associate of Sam Jones, the evangelist and lecturer of unique personality. This connection gave occasion for the widespread use of his books.

(*b*) *Sources of Excell's Songs.* Mr. Excell was like Sankey in being a fine leader of a multitude in song, but not so much of a musician. He wrote the melodies of a number of very successful songs which were completed by competent composers, including Chas. H. Gabriel. The songs of the latter were Excell's greatest asset, as they have been that of Rodeheaver more recently. W. A. Ogden supplied him with some most popular material such as "Look and Live." Travelling in Sunday-school conventions, he came into touch with writers of hymns and of music who supplied attractive material. "Loyalty to Christ" and "The King's Business" by the Cassels, Rev. E. T. and Flora H., were among these happy finds.

(*c*) *Success of Excell's Music in England and America.* This music, with some of Towner's, and Fillmore's "Tell Mother I'll be There," Alexander took to England and around the world and duplicated Sankey's success, although the very opposite of the elder leader in personality and methods of work. The Excell books now dominated the situation and scores of Gospel Song books were issued by divers church and private publishing houses all based on the Excell copyrights and editorship.

This music was western, with few songs by eastern composers. It was animated, rhythmical, excitant, with very little of the quiet devotional style. It was very good revival campaign material, but failed in the quiet prayer meeting.

(*d*) *The Rodeheaver Songs.* In 1912 Homer A. Rodeheaver became "Billy Sunday's" musical associate and began a series of evangelistic song books that have had wide use. Mr. Chas. H. Gabriel being musical editor and supplying a great deal of material, and the use to which these books are being put being much the same, the general style of the songs is much like that of the Excell books. Instead of "The Glory Song" by Gabriel, we have the same writer's "Brighten the Corner Where You Are" as the organizing song. The rather slight emphasis on the devotional, characteristic of the "Sunday" meetings, is reflected in the music of these books.

(*e*) *The Music of Chas. H. Gabriel.* While Gabriel is an exponent of the freer and more rhythmical western type of gospel music, he has not had a pronounced style of his own,—perhaps for that very reason has written a great many exceedingly popular gospel songs, such as "He Lifted Me," "Higher Ground," "Since Jesus Came into My Heart," "Hail, Immanuel,"—probably more than any other living writer. Many of his songs have texts written by himself under the *nom de plume,* "Charlotte G. Homer." He has not only been an extraordinarily fertile, but a versatile composer, succeeding in many lines, such as anthems, men's quartets, cantatas, etc.

Another successful Gospel Song writer coöperating with Mr. Rodeheaver is W. D. Ackley, whose songs have had a wide use, notably: "I am Coming Home," "If

Your Heart Keeps Right," and "I Shall Dwell Forever There."

7. Apparent Close of the Gospel Song Epoch

The change in the musical taste of the churchly musical public and the marked decrease in the voltage of the evangelistic impulse in the evangelical Protestant churches, is already felt in the slowing down of the production of gospel songs. The leading composers of this type of music are rather elderly men, and younger composers are turning their energies to other lines of composition, lacking the fundamental popular appeal.

REVIEW QUESTIONS

1. How was the "spiritual" transformed into the Gospel Song?
2. What are the characteristics of a Gospel Song?
3. How wide is the use of the refrain or chorus?
4. Outline the progress of the transition as found in publications.
5. What was Philip Phillips' share in the introduction of the early Gospel Song?
6. What typical Gospel Song collections were issued before "Gospel Hymns No. 1"?
7. How did the term "Gospel Song" originate and where?
8. What was the strength and what the limitations of Sankey's musical powers?
9. How did "Gospel Hymns" come to be issued?
10. How far did its influence extend?
11. Give the history of the later numbers of the series.
12. What other collections of gospel songs were issued?
13. What change took place in the style and grade of difficulty in the later Gospel Song collections?
14. What new evangelistic campaigns took place and what new composers appeared?
15. What position does Gabriel hold in respect to this new Gospel Song movement?

XXVII

THE HISTORY OF MOTETS AND ANTHEMS

Class Room Suggestion: It may be found more practical to assign this chapter as one to be read without recitation or discussion in the class.

Supplementary Reading: Myles B. Foster, "Anthems and Anthem Composers," Novello, London; Grove's "Dictionary of Music and Musicians," articles "Motet," and "Anthem," Presser, Philadelphia.

As in formal church services of every kind, liturgical and non-liturgical, the anthem is an important feature, it is desirable to know its history and development.

1. Distinction Between Motet and Anthem

It is well to clearly fix the characteristics of motets and anthems.

The motet was the product of the Middle Ages. It was nearly always set to Latin words taken from the Scriptures or from the Missal. It was sung without accompaniment until the sixteenth century. It was polyphonic in character and more or less elaborate, and grew in length until it became almost a cantata in the nineteenth century. In Germany the text finally became German.

The anthem is of English origin, growing out of the motet during the time of the Reformation when its chief difference was its English text. Its development, however, was different from that of the motet on the continent. It received a freer treatment and was more varied

in form. There was the full anthem, the verse anthem and presently the hymn anthem. The words anthem and motet are often used interchangeably as synonyms, but it is wiser to make the proper distinction.

The etymology of the word motet is very uncertain. It may be derived from the Italian *motetto,* a diminutive of *motto,* which originally was applied to a form of secular composition.

The derivation of the word anthem is equally obscure. Its genealogy may be Greek *antiphona,* Italian *antifona,* French *antienne,* Early English *antefre,* then *antem,* then *anthem.* If that is the proper origin its antiphonal suggestion seems to have been lost very early.

2. The Development of the Motet

(*a*) *Continental Beginnings.* It was almost inevitable with the secular musical activity among the people in the eleventh and twelfth centuries and the enlargement of musical resources, that the musical clergy should be stirred to some further development of the church music. The Gregorian chants were officially fixed and the way to development there was barred.

But unofficial additions were permitted, if not encouraged, and passages of Scripture and of the Breviary begun to be set for this purpose. They were more elaborate than the chants and yet undoubtedly simple in structure. Possibly at the very first they were still in unison like the chants, only more varied, but soon developed the use of the discant.

They were also less rigidly ecclesiastical in style, being affected by current popular melodies. As early as 1290 Philippus de Vetriaco issued a book of motets which, as Morley says, "were for some time of all others best esteemed and most used in the church."

Like others of that age, they were crude attempts at two-part harmony. The setting of the mass and the motets was very similar, except that the treatment of the former became more and more complicated and pedantic.

(*b*) *The First Epoch of English Motets.* The First Epoch of really expressive motets embraces the last years of the fourteenth century and the first half of the fifteenth. England was represented by Dunstable, who slightly preceded Dufay, Binchois, Eloy Brasert and Faugues, and whose surviving work shows him the peer of the Netherlanders. Combined with the proof afforded by the round, "Sumer is y-cumen in," whose perfection of contrapuntal correctness displays a skill in the early thirteenth century not developed elsewhere at that time, it shows that English musicians were the leaders, if not the *fons et origo novæ artis,* of the developing counterpoint of the north.

(*c*) *The Second Epoch.* The Second Epoch extended from 1450 to about 1500. O'Keghem is the acknowledged master, although Caron, Gaspar, de Fevin, Hobrecht and Basiron had an almost equal repute. This school made of the music of the mass an opportunity to show their contrapuntal skill and extraordinary ingenuity. The motet on the contrary was less studied, and had greater breadth and simplicity of musical design.

(*d*) *The Third Epoch.* The Third Epoch which overlapped the second as epochs in history often do, for several decades, continued until 1521, the date of the death of Josquin des Pres, the pupil of O'Keghem, and the shining light of this period.

The Flemish school made such rapid advances that they were recognized as the leaders of Europe. With scarcely an exception their motets were based on a *cantus firmus* taken from some solemn plain song, or

some well-known secular melody. One of the parts, most frequently the tenor, takes the simple theme in whole and half notes, while the other parts decorate it with a filigree of florid counterpoint, in lavish imitation and other contrapuntal devices. Setting aside the pedantry that so often disfigured the mechanical settings of the mass, they sought to express the feelings of the chosen text.

The texts were quite varied. There are numerous texts taken from the Gospels, whose subjects are treated, not indeed with dramatic power, but with a profound sense of their deeper meaning, ranging from the exalted praise of the Magnificat to the tragic sadness of the Passion of our Lord. Perhaps the finest music of this era is contained in the Passion Motets.

The Book of Canticles furnished favourite texts for these composers, as did "The Lamentations of Jeremiah."

Perhaps the favourite theme was the Madonna, in whose praise Josquin des Pres, as well as Brumel, Arcadelt, and Loyset Compère, wrote their most beautiful motets.

Many motets were written to add interest to the great festival days of the Church, as well as the name days of the more prominent saints. There were even motets, laudatory of the reigning potentates and princes by composers connected with their courts.

(*e*) *The Fourth Epoch.* The Fourth Epoch, 1521 to 1565, was rather a time of degradation for the motet as well as the mass. Josquin des Pres had a hundred imitators of his faults rather than of his virtues. Ribald tunes, and even words, were associated with both masses and motets. Musical puzzles for the amusement of the trained singers of the choirs were set to sacred texts for them to solve as best they could.

Of course, not all knees bowed to the musical Baal of

frivolity, and there were some excellent motets written by Goudimel, Willaert, Costanza Festa, and Morales. The influence of madrigal writers like Arcadelt and Verdelot was fortunately sane and artistic and continued the progress of really musical development.

(*f*) *The Fifth Epoch.* The alarming progress of the Reformation in the North, and the awakening of the religious life of the Roman Church in the Counter-Reformation, as well as the disgust of the devout souls among both the clergy and the laity, brought on a reaction against this orgy of irreverence and vulgarity, and the authorities at Rome, incited by a strong resolution from the Council of Trent against these musical abuses, proceeded to purge the services of the church from these unworthy musical practices.

Palestrina led not only in the restoration of worthy mass music in his famous "Missa Papæ Marcelli," but ushered in the Fifth Epoch of the motet, the Golden Age of Roman Church music. He composed hundreds of motets fully equal in contrapuntal skill and devoutness of spirit to his exquisite masses. But he not only wrote in the complicated counterpoint, but in the familiar style, varying the ceaseless movement of his voices with strong, impressive series of plain chords like stately psalm tunes.

Other Italian composers, his peers in contrapuntal facility, in unbounded wealth of musical resources, in harmonic strength and expressiveness, although lacking, perhaps, his suavity of melody and devoutness of spirit, were Vittoria, Morales, the Anerios, the Naninis, and Marenzio. Orlando di Lasso was prominent in Flanders, Willaert, di Rore, the Gabriellis, and Croce in Venice, Tallis and Byrd in England. The mediæval polyphonic music reached its crest in the motets of the Fifth Epoch.

(*g*) *The Sixth Epoch.* The Sixth Epoch beginning

with the seventeenth century was again a time of decadence. The masters were dead. A new musical era was preparing, but had not come to fruition. Ideas of harmony were changing. The modern scales with their new harmonies were coming into use.

(*h*) *The Seventh Epoch.* The Seventh Epoch brought in the instrumental accompaniment about the middle of the seventeenth century. The old ecclesiastical modes were abandoned and the modern tonality held full sway. With new forms of expression and wider resources Scarlatti, Pergolesi, and others wrote magnificent motets in the new manner.

(*i*) *The Eighth Epoch.* The Eighth Epoch found its greatest development in Germany. Motets of Keiser, Johann Christopher Bach, and his even greater nephew, Johann Sebastian Bach, Graun, Hasse and even Handel are the glories of this period in which the contrapuntal strength of the Fifth Epoch were reinforced by the more varied modern harmony and the power of the organ and other instruments.

(*j*) *The Ninth Epoch.* The motets of the Ninth Epoch, the nineteenth century, are in the main cantatas rather than motets. Haydn, Mozart, Cherubini, transcended the limits of the typical motet, although their music is most impressive and beautiful. Mendelssohn alone seems to have succeeded in exemplifying the type in a way worthy to be classed with the great writers of the eighteenth century.

3. The Development of the Anthem

In England the motet after the Reformation was transformed into the anthem, which had a separate development and a renewed vigour. It was given an English text, differing at first in that particular only from the motet.

Indeed, the same composition was called a motet with Latin and anthem with English text.

(*a*) *The Early Period (1520–1625).* As we have seen, the English composers from the beginning had been to the fore in the writing of the motets. Tallis and Byrd shared with Palestrina, Orlando di Lasso, Willaert and others the glory of the Golden Age of polyphonic church music. Hence the foundation of the anthem which succeeded was broad and strong. The masters of the motet, Tallis, Byrd, Tye, Gibbons, turned from the writing of motets with Latin texts to the writing of anthems to English texts, and found a new inspiration in the fresher rhythms and accentuation of the new texts.

At first the anthems were "full," that is, were for a full chorus like a motet. Later in this period "verse" or solo anthems appeared, Gibbons appearing to be the leader.

During this period the organ does not seem to have been used, but there is frequent provision in the music for "viols." This string orchestra was in unison with the voices, but filled in the vocal rests, or were used for "symphonies," or interludes, for several measures. Afterwards the organ was introduced for the full chorus, but the stringed instruments accompanied the solo parts of the "verse" anthem.

(*b*) *The Second Period (1650–1720).* While the composers of the early period were, as was to be expected, still under the dominion of the mediæval motet, the composers of the Second Period, chiefly represented by the organists connected with the court of Charles II, through him fell under the influence of Lully, the Italian opera writer, who won so high a place in the court of Louis XIV of France, and developed a more varied and even secular type of the anthem. Pelham Humfrey had been

trained under Lully. Wise, Blow, Henry Purcell, Croft, Weldon and Jeremiah Clarke had been either directly or indirectly pupils of Humfrey.

This led to an entire change in the spirit and character of the anthem. Mere formulas were set aside and new forms and fresh details were sought. There were striking and even daring harmonies and the parts were smoother and more melodious. There is evidenced a minuter study of the text, and greater pains were taken to make the music fit the flow of its varied feeling. In general, there was more emotionality and expressiveness.

Henry Purcell has been recognized as the genius of this group, as he excelled not only in anthem writing, but in every form of writing then current. His early death at the age of thirty-seven has been lamented as a great loss to English music, as his music gave promise of even greater work to follow.

The verse or "solo" anthem was characteristic of this period, as the full anthem had been of the previous one. In many of them the choir only sang an introduction or a finale.

The accompaniment took a more prominent place during this period. The anthems became more and more fully orchestrated, trumpets, hautboys, bassoons, flutes, and even drums, being added to the bow instruments. The pleasure of the dissolute King in light, frivolous music led to unchurchly compositions. Pepys in his diary records that "One of his Majesty's chaplains preached, after which, instead of the ancient, grave, and solemn weird music accompanying the organ, was introduced a concert of twenty-four violins between every pause, after the French fantastical, light way, better suiting a tavern, or playhouse than a church."

While this period shared in the low spirituality that

characterized the religious life of the whole nation (affecting, as we have seen, the psalm tunes as well), its influence in breaking down the rigidity of the old anthem ideals was a distinct service and made the varied and adaptable anthem of to-day possible.

(*c*) *The Third Period (1720 to the present).* The leading anthem composers of the early part of this period were Maurice Green, William Boyce, Attwood, Battishill, Hayes, Walmisley. There was little of novelty developed in this school of writers, but they were more churchly and devout in spirit. They were later followed by Sir John Goss, Samuel Sebastian Wesley, and later still by Barnby, Stainer, West, Parry, Stanford and others.

4. American Anthems

The development of American anthems has been on entirely different lines. There have been so many influences affecting it, that it is difficult to chart out the path it has taken.

(*a*) *Early American Anthems.* In connection with the old New England Psalmody, there were occasional anthems published, most of which were reprints of short, easy English compositions. They were of the fugal order, akin to the fugal tunes. The original American anthems were composed on the same model. Many of the more elaborate fugue tunes were practically choir anthems. The word "motet" was used for short sentences, rather than for the larger anthem form, although the two names were used interchangeably.

(*b*) *Anthems by Mason and His Associates.* However, the reforms instituted by Lowell Mason swept away all that had gone before in the way of anthems. His problem was to supply choir music for volunteer choirs of little culture and merely sight reading training.

He found some material in England, more in Switzerland and Germany, which had the necessary simplicity and attractiveness. To this he added very simple, straightforward compositions of his own, or by his associates, that served his immediate purpose. His limitations as a composer were more evident here than in his hymn tunes.

Some of the convention leaders associated with him displayed more architectonic gifts. Luther O. Emerson did not succeed it writing acceptable hymn tunes as did Mason, but was far superior to him in the writing of anthems. While William B. Bradbury is remembered chiefly by his Sunday-school and gospel songs, he wrote some attractive anthems in a purely popular style. These earlier anthems were without instrumental accompaniment, based not on principle, but on the general lack of instruments.

(*c*) *The Dudley Buck School of Anthem Writers.* While both Mason and Bradbury had European training, the limitations imposed upon them by their work among the people kept them free from an academic attitude and assured their pure Americanism. But when Dudley Buck returned from his training abroad to the better trained choirs of Eastern cities, he united to his American sense of practical efficiency a more scholarly bent of mind, producing a long series of anthems particularly adapted to the needs of more or less well trained quartet choirs, thus establishing an entirely different type of anthem from those of Mason and Emerson. Other writers like Harry Rowe Shelley and P. A. Schnecker were rather prolific in this quartet choir music.

(*e*) *Present Tendencies in American Anthems.* The Dudley Buck type has been greatly influenced by current English anthem music and has become more churchly, more syllabic, more typically worshipful. The composi-

tions of Horatio W. Parker, Arthur Foote, George W. Chadwick, and others of our American composers, are very much superior from an artistic standpoint to current scholarly music in England.

Among the recent writers of this artistic music may be mentioned Jas. H. Rogers, George B. Nevin, W. R. Spence, A. W. Lansing, W. H. Neidlinger, Paul Ambrose, W. Berwald, G. W. Marston, Chas. F. Manney, C. W. Hawley, Daniel Protheroe. It is still American in its availability, and in its freshness and charm, having escaped the woodenness of so much of present day English anthem music.

While the Lowell Mason type has become somewhat more strong and varied in harmony, and has acquired an instrumental accompaniment, it retains the popular rhythmicalness and emotionality. The popular anthem tradition of Mason was continued by writers of singing school books such as George F. Root, I. B. Woodbury, H. R. Palmer, C. C. Case, M. L. McPhail, H. P. Danks, and by most of the writers of Sunday-school and gospel music like Lowry, Doane, Ogden, Sherwin, Seward, Kirkpatrick, Sweney and others. In the last few decades these popular anthems from the pens of E. L. Ashford, Oley Speaks, Ira B. Wilson, H. W. Porter, E. S. Lorenz, J. S. Fearis, J. A. Parks, Charles H. Gabriel, J. Lincoln Hall, T. Martin Towne, Carrie B. Adams, E. K. Heyser, J. B. Herbert, Paul Bliss, and others, have so increased in strength and general artistry, that many of them approach the sedate Dudley Buck style in quality. Never has the popular anthem in America been as worthy of respect as now.

REVIEW QUESTIONS

1. Why is a knowledge of the history of the anthem important?

2. What is the distinction between a "motet" and an "anthem"?

3. What are the three forms of anthems?

4. Describe the beginning and early development of the motet.

5. What proof have we of the quality of the early English motet?

6. Who were the leading composers of motets in the Second Epoch?

7. What were the striking features of the motet in the Third Epoch?

8. What unfortunate conditions prevailed in the Fourth Epoch?

9. Who were the shining lights of the Fifth Epoch?

10. What other great composers brightened that epoch?

11. Why was the Sixth Epoch a time of decadence?

12. What changes took place in the Seventh Epoch?

13. Who were the German motet writers of the Eighth Epoch?

14. In the last century what change has taken place in the motet?

15. What was the chief difference between a motet and an anthem in early English Reformation times?

16. Who were the founders of the English anthem?

17. What ideals governed the composition of anthems in the Second Period?

18. Who were the leading composers of this period?

19. What were the characteristics of the Third Period?

20. What was the form of the early American anthem?

21. What was the character of the anthems introduced by Mason and his associates?

22. Who of his followers outranked Mason as an anthem writer?

23. What influence did Dudley Buck exert?

24. Give the names of the composers of his school.

25. What influence has affected the ideals of artistic American composers?

26. Who may be mentioned as leaders in this modern artistic church music?

27. Who were the popular anthem writers after Mason?

28. Give the names of recent writers of popular anthems.

29. What change has taken place in the average quality of their compositions?

XXVIII

ORATORIOS AND CHURCH CANTATAS

Class Room Suggestion: If time is lacking for a full recitation on this chapter, it can be assigned as a reading chapter.

Supplementary Reading: Grove, "Dictionary of Music and Musicians," Arts. "Cantata," "J. S. Bach," and "Oratorios"; Dickinson, "Music in the Western Church"; Parry, "Johann Sebastian Bach," Putnam, N. Y.

1. Oratorio and Cantata Defined

An oratorio is an extensive musical composition consisting of solos and choruses with a more or less religious text, Biblical or otherwise, accompanied by full orchestra, or by organ, to be rendered without action, costumes, or scenery. Its name was derived from the fact that it was first sung in a large and public way in the oratory, or chapel, in the church of S. Maria in Valicella, under the direction of S. Neri, the founder of the congregation of Oratorians.

A church cantata is a composition of less extent and less elevated style than the oratorio set to religious words and primarily intended for church use, being sung without action, costumes, or scenery. There is really a very slight line of demarcation between a short oratorio and a lengthy cantata, hence they are treated concurrently.

2. Origin of the Two Forms

Yet their immediate origin was quite different. The church cantata grew out of the secular cantata which was at first a musical recitation with occasional chords on an instrument. This monody was also the basis of the opera.

When the religious texts were employed and applied to the usage of singing the text of the Gospels during the services of the Passion week, established long before the monodic impulse was felt, the church cantata was produced. To apply it to other festival occasions and even to regular services was an easy step.

The likeness between the oratorio and the church cantata was so great they developed together, despite the fact the oratorio was seldom used in church service, except at Christmas and Easter, while the cantata often took the place of the motet in the church service.

While the secular cantata was developed in Italy, there was little or no interest there in the church cantata, unless the musical mass, the Te Deum, and the Stabat Mater are to be subsumed under this term. It was not until the Protestant composers of the north saw the necessity of the musical enrichment of their services, that the church cantata found its full development.

3. The Transformation of the Miracle Play

The miracle play is the parent of the oratorio. Among the illiterate peoples, some of them only recently won from paganism, it was only possible for many centuries to impress them with the Biblical history by means of preaching. In the twelfth century the idea was conceived of impressing the eye as well as the ear by means of dramatic representations of Biblical scenes and of moral allegories in rather popular style. By the end of the century these miracle plays, as they were called, were in quite common use in England and were very popular. They survived there for over two centuries.

They were introduced a little more slowly on the Continent, being in general use in Italy in the thirteenth century and in Germany and Bohemia in the fourteenth.

As their use became general, abuses crept in. They became frivolous, and even vulgar, and church authorities sought to prevent them. In the sixteenth century S. Philip Neri of Rome believing the essential principle a good one introduced them as part of week night services held in his oratory, introducing sacred music of a popular kind as a prominent feature in them. His sermons preceded or followed them. The name oratorio was soon accepted for these sacred plays with music, not only in Rome, but throughout the Church.

Their subjects were chosen from the Bible and from the lives of favourite saints, or based on moral allegories. "The Conversion of Paul," "Abraham and Isaac, his Son," "Abel and Cain," "Lamentation of Mary," "The Spiritual Comedy of the Soul" were characteristic titles that survive.

4. The Development of the Oratorio in Italy

While solos with instrumental accompaniments had been sung by the people for centuries, they were now accepted by the Church for use in these germinating oratorios. In 1600 was given in this same oratory, Cavalieri's "The Representation of the Soul and the Body," an allegory which was more pretentious in structure and length. Composers were busy developing the opera, and the artistic oratorio is not heard from until 1627 when a new movement began with "The Lament of the Virgin Mary" by Michelagnolo, resulting in the composition of a flood of oratorios, good, bad and indifferent, chiefly the second. The best was "Querimonia di S. Maria Maddelena" by Domenico Mazzuchi, which again was rendered in the Oratory of St. Neri. Carissimi (1604–1674) wrote a long series of oratorios far superior to those of his predecessors, the gem among

which was his "Jephtha." His pupil, Scarlatti, was also prominent in the writing of oratorios, as was Stradella, an almost mythical figure in Italian music. Caldara, Colonna and Stradella represent the peak of Italian oratorio music.

The opera and oratorio developed side by side in Italy, affected by the same influences. Indeed, composers wrote both, very much as Handel did, a century later.

They differed chiefly in their subjects and in the mode of representation, the oratorio having lost its dramatic accessories. It is not a pleasant task to follow the decay of the oratorio in Italy. The end came with Rossini's complete fusion of oratorio and opera in "The Israelites in Egypt," which appeared as an oratorio with that title and as an opera with the title "Zora."

5. The Oratorio in Germany

In Germany, too, the oratorio grew out of the miracle play. But while in Italy the rage for the opera had submerged the religious impulse of the oratorio, in the north the spirit of the Passion music, and the traditional church melodies, took possession of the miracle play, and produced a composition of a profounder and more religious character. The modern oratorio is a child of the Germans.

(*a*) *Heinrich Schuetz.* Whether Heinrich Schuetz (1585-1672) was the "father of German music" depends on the definition of the term music; but there can be no doubt that he was the father of the German oratorio. He links up with Italian church music by having spent three years of study under Giovanni Gabrielli of Venice. However, Gabrielli was an old man with the more serious religious ideals of half a century before.

Schuetz, therefore, had the benefit of the Venetian

progressive attitude and the new broadening of musical resources in the monodic style, and in the emphasis of instrumentation, without the lightness and secularity which characterized the younger men of southern Italy. He wrote a resurrection oratorio in 1623 which was followed by the "Seven Words on the Cross" and four Passion oratorios. His work was reverent and expressive. He still had a strong leaning to the old Plain song melodies, but introduced a highly expressive recitative.

The oratorios of Schuetz and his contemporaries were really little more than cantatas, although they had larger instrumental elements than the Passion music of their predecessors, and introduced the solo work so prominent in the Italian oratorios. But they still clung to the Plain song melodies of the established liturgy.

(*b*) *Johann Sebastiani.* In 1672 Johann Sebastiani produced a Passion oratorio without any trace of the old Plain song and from this time on the chorale takes its place in a more or less elaborate setting. Indeed this had been done before the time of Schuetz to some extent.

(*c*) *Reinhard Keiser.* The next German composer of oratorios of any eminence was Reinhard Keiser (1674-1739), also a prominent opera writer. His Passion oratorios were extremely expressive and excelled in smooth melody and dramatic power. Keiser was twelve years older than Bach and Handel. What influence he had upon them cannot be accurately estimated, of course. The Bach who walked fifty miles to Luebeck, to hear the playing of Buxtehude, the Danish organist, would not have overlooked the amazing success of Keiser at Hamburg or neglected to study his church music. Certain it is that his style, which had been rigid and mechanical, suddenly took on a smoothness and expressiveness not found in his earlier work.

(*d*) *Johann Sebastian Bach.* Johann Sebastian Bach wrote four oratorios: a "St. John Passion," a "St. Matthew Passion," a "St. Luke Passion" and a "Christmas Oratorio." The "St. Luke Passion" is early work and is not highly esteemed; indeed Mendelssohn, the resurrector of Bach's music after a burial of eighty years, declared it spurious. The other Passion oratorios are recognized as Bach's most splendid, even monumental, works in which the religious music of Germany for a century comes to a climax.

His "Christmas Oratorio" is not so unified a composition, as it consists of six cantatas, one for each of the Christmas holidays. Yet, as being but parts of one general theme, in the same general spirit and style there is a general unity that justifies their combination into an oratorio.

While not nominally an oratorio, and having a structure entirely apart, it will not be amiss here to speak of his "Mass in B Minor" which has been recognized by high authorities as the greatest musical composition ever written. It is frequently sung at great choral festivals in this country.

Bach wrote an extraordinary number of cantatas, no less than two hundred and ninety-five; while they were not as extensive as his oratorios, of course, they were no less remarkable for the strength, fertility, and expressiveness of their music. But they are not epic in structure or spirit, confining themselves to minor aspects of the Life of Christ, or to some particular phase of praise or prayer. They varied in length from twenty minutes to an hour. They were based upon the lesson of the day for which they were written. They were written about the "Hauptlied," or leading chorale of the day. Parts of this often appear in every number of the cantata.

Bach is the outstanding musical figure of Germany. All that is best in the German character, in German creative power, in depth of German emotionality, in devoutness of German spirit, found its supreme expression in him. His architectonic grasp, his fertility of invention, his power of emotional expression, his masterly and exhaustive contrapuntal and polyphonic skill, his knowledge and control of his musical resources, his unfailing certainty of detail and graceful touch, all find expression in these oratorios.

While he is a composer's composer, it requiring the insight of a trained musician to comprehend all his excellencies, he also appeals strongly to the thoughtful and susceptible layman in music. He is bound to be *caviar* to the hearer whose musical horizon is bounded by the current popular ditty, or the latest gospel song.

(*e*) *Georg Philip Telemann.* Georg Philip Telemann (1681-1767) was a popular and amazingly productive writer of all forms of music, including oratorios. He was a contemporary of Bach and Handel. A highly skilled contrapuntist, Handel said of him that he could write a motet in eight parts as easily as any one else could write a letter. He wrote forty-four Passion oratorios alone, and hosts of other oratorios.

He wrote innumerable cantatas, all in the same combination of conventional counterpoint and Italian opera airs. While the dust gathered on the manuscript of Bach, Telemann's music was popular throughout Germany and, no doubt, was temporarily useful; but his influence on German church music was artistically deleterious in his day and after. His most popular oratorios were "The Last Judgment" and "Morning, Noon and Night."

(*f*) *Georg Friedrich Handel* (1685-1759) wrote

several oratorios before he left Germany which must be classed with German oratorios. He wrote "The Triumph of Time," "Resurrection" and a Passion oratorio to the text of Brockes, ever popular with composers. These works had little in common with his later English oratorios, being like those of Telemann, German in counterpoint and Italian in style of melody.

(*g*) *The Italian Influence on German Oratorios.* The Italian secular influence, already felt in Bach's lifetime, became much stronger in the next generation. Italian operas were very popular and naturally affected the style of the church composers as well. There was a conflict in the minds of the German composers between the severer inherited German traditions and native tendencies on the one hand and the softer, more pleasing, Italian manner on the other.

They not only personally felt the attraction of these musical innovations, but had their worldly-minded royal and ducal lords and frivolous courts to please. This struggle between the indigenous and the foreign tendencies was continued in every department of music throughout the whole eighteenth century, as any one conversant with the trials of Mozart and Beethoven in Vienna will remember, and was not ended until the Napoleonic wars roused the national self-consciousness of the German nations.

(*h*) *Heinrich Graun.* It was under these circumstances that Karl Heinrich Graun (1701-1759) wrote his oratorios. His early life was devoted to the writing of operas in the Italian style which were very popular. In his last years he wrote sacred music, the most notable of which was a Te Deum and his oratorio, "Der Tod Jesu" (The Death of Jesus). The latter had a phenomenal popularity, much like that of the "Messiah" in

England. It was a work of great excellence and can be placed by the side of Mozart's "Requiem" and Haydn's "Creation." Graun was a very skillful contrapuntist; his harmony was strong and significant; his melodies were expressive and emotional, although not always great. He had considerable dramatic power.

(*i*) *Minor Composers of Oratorios.* Johann Adolph Hasse (1699-1783) wrote an oratorio "The Pilgrims at the Sepulchre" for the Electoral chapel at Dresden that had considerable vogue, but added nothing to the resources displayed by his predecessors.

While Carl Philip Emanuel Bach's "Passions-Cantate," "The Resurrection and Ascension" and "The Iraelites in the Desert," have great expressiveness and some strength, they were, like all the music of his contemporaries, affected by the prevailing rationalism and irreligiousness of the age, and had little devotional value.

Wolfgang Amadeus Mozart (1756-1791) took no interest in the oratorio as such, but in his "Requiem Mass" showed what he might have done had his interest in that art form been aroused.

(*j*) *Franz Joseph Haydn.* Franz Joseph Haydn (1732-1809) was early attracted by the music of Carl Ph. Em. Bach, and his musical attitude was determined largely by that admiration. While his energies were largely devoted to the development of the string quartet and especially of the symphony, in 1775 he wrote the oratorio "The Return of Tobit." In 1785 appeared his Passion Oratorio, "The Seven Words of our Saviour on the Cross."

It was not until he had nearly reached his three score and ten, in 1798, that his *opus magnum,* "The Creation," was written. The text had been suggested during his last visit in England, having been compiled by Lidley

from Milton's "Paradise Lost." "Never was I so pious," he afterwards said, "as when composing the 'Creation.' I knelt down and prayed God to strengthen me for my work." The work made an extraordinary impression upon the public and in the public estimation ever since has stood second only to Handel's "Messiah."

In 1801 appeared his other famous oratorio, "The Seasons," based on Thomson's well-known English poem, having the same title. At the time its success equalled that of "The Creation," but the latter oratorio is now recognized as the stronger of the two.

Haydn's music is not as great as that of either Handel or Bach, but it has a grace and charm, an appealing and contagious spontaneity one finds nowhere else.

(*k*) *Ludwig von Beethoven.* "The Mount of Olives" issued in 1811 was an attempt at oratorio by Ludwig von Beethoven which by no means rose to the height of excellence reached by his sonatas, his symphonies or even his string quartets; like his opera "Fidelio," it barely escaped being a failure and fathered by a less famous composer would have been long since forgotten. It should be said, however, that it contained some numbers of conspicuous excellence.

(*l*) *Franz Schubert.* Franz Schubert (1797–1828) essayed to write oratorios, completing "Miriam's Song of Victory" but leaving "Lazarus" unfinished. Neither the former, which is little more than a cantata, nor the torso of the latter, has secured much public attention, despite the composer's prominence.

(*m*) *Louis Spohr.* While Louis Spohr (1784-1859) has by no means the standing of the two preceding composers mentioned, he was much more successful in writing oratorios than they. His "The Last Judgment" (1826) has had a perennial popularity, much greater

than that of his other oratorios, "Calvary" (1835) and "The Fall of Babylon" (1842), although critics think it less valuable because of its saccharine chromaticism; but that fault may have been the ground of its greater popularity.

These oratorios were very popular, not only in Germany, but in England as well. The reaction of that popularity, however, has almost obscured his fame in these later days—undeservedly so. While not first-rate, he was a high second-rate musical genius.

Spohr's technical workmanship was very admirable, although he cannot be accounted a great master of counterpoint; for while his parts moved smoothly enough, the result was not particularly interesting or effective. He had a very strong sense of symmetry, but it presently became mechanical. He had some of Mozart's charm of melody which might have been expected from a violin *virtuoso.*

(*n*) *Minor Oratorio Writers.* After Spohr a number of German composers turned to oratorio writing, none of whom wrote anything that the world cares to remember—men such as Schneider (who had sixteen oratorios to his credit), Lindpainter, and Neukomm, whose "David" was much sung in America.

(*o*) *Felix Mendelssohn Bartholdi.* When we come to Jacob Ludwig Felix Mendelssohn with the affix Bartholdi (1809-1847), we find a different situation. His "St. Paul" (1836), "Hymn of Praise" (1845), and "Elijah" (1846), made an immediate success which not only crossed the Channel, but even the ocean to America.

The reaction is on from this extraordinary popularity, and the "higher critics" assail the music as bourgeois, middle class, as saccharine and pleasing, and as out of date; but this attitude grows out of the current emphasis

of the discord at the expense of the concord, which finds its supreme expression in Richard Strauss, "This too will pass." The great musical public still delights in these great masterpieces of Mendelssohn and they are heard quite as frequently as any other oratorios, with the exception of the "Messiah."

(*p*) *Recent German Oratorios.* Other more recent oratorios are "Welt Ende" (The End of the World) by Joseph Joachim Raff (1822–1882), "Arminius" and "Moses" by Max Bruch (1838-1907), "Zion" by Wilhelm Niels Gade (1817–1890), "Christus" and "St. Elizabeth" by Franz Liszt (1811-1886), "St. Ludmilla" by Antonin K. Dvorak (1841–1904). The latter is best known as the composer of a popular "Humoreske" and of the "New World Symphony."

6. The Oratorio in England

(*a*) *George Frederick Handel.* English oratorio sprang into being full-orbed, like Minerva from the head of Jupiter. There had been nothing in English music that could under any definition be construed as an oratorio before the immigration of a German composer, George Frederick Handel (1685-1759) into England in 1710. For twenty-three years he was an operatic composer in the Italian style, writing only one oratorio, "Esther," in 1720, which however did not have a public performance until 1732. Its success led him to write "Deborah and Athalia" in 1735; but it was not until 1738, when he was fifty-three years old, that he began to give himself wholly to the writing of oratorios.

His "Saul" was an instant success, yet few in our day have heard more than the "Dead March." "Israel in Egypt," now esteemed as second only to "The

Messiah," was ill received by his public, despite its tremendous choruses. In 1741, at the request of the Duke of Devonshire, then Lord Lieutenant of Ireland, he wrote and produced in Dublin his greatest masterpiece, "The Messiah." It is said to have been written in twenty-four days; but it is certain that he laid under contribution numbers he had previously composed and even numbers by other composers.

In quick succession followed "Samson" (1743), "Joseph" (1744), "Belshazzar" (1744), "The Occasional Oratorio" (1746), "Judas Maccabæus" (1747), "Joshua" (1748), "Solomon" (1749), "Susanna" (1749), "Theodora" (1750), "Jephtha" (1752). For the remainder of his life he was almost entirely blind, but still presided at the organ during the presentation of his oratorios and even played organ concertos.

Most of Handel's oratorios, like his operas, are dead. "Judas Maccabæus" and "Joshua" are practically never rendered, but occasionally a chorus or an aria from them is heard. "Israel in Egypt" has more vitality, but is rarely sung. "The Messiah" is very much alive, being probably sung oftener than all other oratorios together. Thousands of singers in the English speaking world can sing their parts without notes. The "Hallelujah Chorus" made such an impression on its first rendition that when that majestic passage began, "For the Lord God Omnipotent reigneth," the audience, including the King, who was present, rose to its feet and remained standing to the end of the chorus. Thus originated the present custom of standing while it is sung. "Unto us a Son is born" is another number of extraordinary impressiveness. The chief solos of the oratorio are "I Know That My Redeemer Liveth," "He was Despised," and "Why do the Heathen Rage?" Whether musical

or not, every minister should be familiar with the general features of this great oratorio.[1]

(*b*) *The English Oratorio after Handel.* English oratorio music after Handel does not call for extended consideration. Writers who excelled in liturgical music like Boyce and Arne attempted work in this form, but with very indifferent success. Plenty of oratorios were produced in the century that followed Handel, but it was largely academic,—"gemachtes Zeug" (made stuff)—among which "Palestine" by William Crotch (1775-1847), "The Woman of Samaria" by William Sterndale Bennett (1816-1875), "Jerusalem" by Henry Hugo Pierson (1815-1873), "Eli" and "Naaman" by Michael Costa (1808-1884), are perhaps the most notable.

During the last half century there has been somewhat a revival of interest in the oratorio. Sir Charles Hubert Hastings Parry (1848-1918) has to his credit "Judith" (1888), "Job" (1892), and "King Saul" (1894), which have added to his fame. Sir Edward Elgar (1857–) has made perhaps the strongest impression of any contemporary composer of oratorios with his "Dream of Gerontius," "The Apostles," and "Lux Christi," although the general public has not responded to them very enthusiastically. Sir Arthur Seymour Sullivan (1842-1900) struck a more popular chord with his "Prodigal Son," "The Light of the World" and the "Golden Legend." Equally kindly has been the response

[1] Grandeur and simplicity, the majestic scale on which his compositions are conceived, the clear definiteness of his ideas and the directness of the means employed in carrying them out, the pathetic feeling expressed with a grave seriousness equally removed from the sensuous and the abstract,—these are the distinguishing qualities of Handel's music (Julian Marshall in Grove's "Dictionary of Music").

of the choral and church public on both sides of the Atlantic to Alfred R. Gaul's "The Holy City," "Ruth," "The Ten Virgins" and "The Prince of Peace." A little less popular, perhaps, but more scholarly are the oratorios, "The Crucifixion," "Gideon" and "The Daughter of Jairus," by Sir John Stainer, "The Crusaders" by Henry Hiles and "Judith" by C. H. H. Parry (1840–1901).

(*c*) *The Church Cantata in England.* During the last half century English composers have done creditable work in church service cantatas. Among the more useful of these are "Olivet to Calvary" by J. H. Maunder, "Harvest Cantata" by G. Garrett, "Song of Thanksgiving" by F. H. Cowen, and "The Passion" by J. Varley Roberts, having had wide use in America as well as in England. The Nonconformist church music writers of cantatas have been quite prolific in the writing of cantatas, but they have studied efficiency and practicability rather than artistry, having in mind actual use by church choirs in church services. Arthur Berridge and Chas. Darnton have done excellent work in these lines.

7. The Oratorio in America

In America there has been a great deal of interest in European oratorios, particularly, and somewhat naturally, in the English, and they have been widely sung; but our composers have not felt the urge to write in that form. Dudley Buck (1839-1912) wrote "The Golden Legend," and the "Light of Asia." His cantatas, "The Coming of the King" (Christmas), "The Story of the Cross" (Good Friday), "Christ, the Victor" (Easter), "The Triumph of David," and "Midnight Service" (New Year's Eve), his latest published works, are so scholarly and yet practicable and pleasing that they promise to be

useful for many generations to come. John Knowles Paine (1839–1906) produced "St. Peter" in 1873. A more brilliant work was "Hora Novissima" by Horatio William Parker (1863–1919), which had a wise use in this country and abroad. His other oratorios, "Morven and the Grail" and "The Legend of St. Christopher" have evoked less enthusiasm. "Noël" by Geo. W. Chadwick is another noteworthy American oratorio.

8. The French Oratorio

French oratorio began with Marc Antoine Charpentier (1634-1702), whose "David and Jonathan" and "The Sacrifice of Abraham" are now forgotten. "Joseph" by Henri Etienne Mehul (1763-1817) is a more noteworthy work.

The most striking oratorio produced in France up to that time was "The Infancy of Christ" which Hector Berlioz (1803-1869) produced in 1854. It is full of charming music, but has not won its way in this country.

"Les Beatitudes" by Franck, Cæsar (1822-1890), is recognized as the best oratorio (although he does not call it by that name) which has been written in France. His "Ruth," "Rebecca" and "Redemption" are the best of a series of short oratorios, or "Scenes Bibliques." "The Deluge" and "Noël," a Christmas oratorio, by Charles Camille Saint Saëns (1835-1920), are noteworthy examples of French pseudo-classicism mingled with applications of modernity.

Charles Francois Gounod (1818-1893), more widely known as the composer of the ever popular opera, "Faust," wrote two oratorios, "Redemption" and "Mors et Vita," the former of which has been widely used, not only in England, but in America. The chorus,

"Unfold, Ye Portals" has been very popular as an Easter and festival number for chorus choirs.

9. The Passing of the Oratorio

The oratorio as a living art form may be said to have passed. It is no longer being sung spontaneously by our great choirs. It is too long, too strenuous in its demands for our busy age. The present type of religion is too practical, too unmystical to respond to its majesty and profundity. The cantata to some extent has taken its place. Its shorter length and less massive style make it more practicable and more appealing to singers and hearers alike.

10. The Church Cantata in America

It will not be amiss to hurriedly survey the development and present status of the cantata in America. Originally the field of cantata was artistic entertainment and not religious edification. Bradbury's cantatas, "Esther" and "Daniel," and Root's "Belshazzar's Feast," "Daniel," "The Pilgrim Fathers" and "The Haymakers" had no religious significance. They were intended for Singing Convention concerts despite the Biblical character of some of them. Later the service use of English cantatas became more general, and a comparatively easy grade of American cantatas began to appear. The leading composers in this churchly type of cantatas have been P. A. Schnecker, "The Fatherhood of God," E. L. Ashford ("Cross and Crown"), Geo. B. Nevin ("Adoration"), Ira B. Wilson ("The First Easter"), J. S. Fearis ("Star of the East"), H. W. Porter ("Resurrection"), Finley Lyon ("The Great Light"), E. S. Lorenz ("Easter Evangel"), E. K. Heyser ("Easter Alleluia"), Carrie B. Adams ("Easter Praise"), and H.

W. Petrie ("Light Eternal"). In freshness, strength, and impressiveness they average much higher than the Nonconformist cantatas of England, and some of them closely approach, if they do not equal, the easier Established Church cantatas in strength and effectiveness.

REVIEW QUESTIONS

1. How do the oratorio and the cantata differ?
2. What was the origin of each?
3. How was the miracle play transformed?
4. Give the details of development of the oratorio in Italy.
5. In whose work did its decadence in Italy culminate?
6. State the value of German oratorio writers before Bach.
7. How many oratorios did Bach write?
8. How many cantatas?
9. What was the scope of Bach's cantatas?
10. In what particulars did Bach excel?
11. What was the effect of Italian musical ideals?
12. What was the character of the oratorios of Graun?
13. What minor composers followed Graun?
14. What important oratorios were written by Haydn?
15. What success had Beethoven with oratorio?
16. Give the title of Spohr's most important oratorio.
17. Who was the next important oratorio composer and what were his chief works?
18. Who are the more recent German oratorio writers and their most important works?
19. Who introduced the oratorio into England and what are his most important works?
20. How many of Handel's oratorios are still sung?
21. Give the most important numbers of the "Messiah."
22. Give the names of recent oratorio and cantata writers and their most famous works.
23. What American composers have attempted this form of composition?
24. Who were the prominent oratorio composers in France?
25. Why is the oratorio passing as an art form?
26. Detail the development of the cantata in America.
27. What American composers are prominent as writers of cantatas for church use?

IV

THE PIPE ORGAN

XXIX

DESCRIPTION OF THE PIPE ORGAN

Class Room Suggestions: This is a very important chapter. Secure a competent organist or organ builder to take the class, either as a whole or in detachments, through a good sized pipe organ and point out and demonstrate its several parts. This should be done after the chapter has been studied and recited.

Supplementary Reading: Clarke, "Outline of the Structure of the Pipe Organ," Ditson, Boston; Wicks, "Organ Building for Amateurs," Ward, Lock & Co., London; Archer, "The Organ," Novello, London; Nicholson, "Organ Manual," Ditson, Boston; Dickson, "Practical Organ Building," Crosby Lockwood and Co., London.

THE pipe organ has been so conspicuous a feature in the present day church service that the manager of that service should have a clear idea of its mechanism, as well as of its possibilities of usefulness in his order of service. It will be useful, therefore, to devote a chapter to its general description. In the limited space available only the more outstanding parts can have consideration.

1. THE PIPE ORGAN AN EXCEEDINGLY COMPLICATED INSTRUMENT

The pipe organ is not so much a single instrument as an assembly of instruments. It has gathered up into itself the striking qualities of all other instruments, wind, string, and even percussion. Every register or stop, except those that only partially extend through its range, is a complete instrument in itself, having a marked individuality of its own, just as a violin, or the clarinet in the great orchestra, but with a wider range and larger possibilities. A pipe organ of twenty-five speaking registers is made up of twenty-five individual organs, the combinations of which are almost infinite. The

average organ has rather more than less than 1,500 pipes, each of which has a pitch or a voicing peculiar to itself, and must be under control to speak only when it is wanted. There is an indefinite number of details in an organ and every one is important to its success.

2. The Key Desk or Console

The central control of the pipe organ, with its keys, tablets, pistons, knobs, pedals, and swell and composition pedals, is called the Key Desk when it is built into the instrument, and Console, when it is separate. Whether permanent or movable, it is the brains of the instrument, which initiates and controls all its action. It calls for careful study.

(*a*) *Its Keyboards or Manuals.* There are a few small pipe organs that have but one bank of keys, or manual; generally there are from two to four, or even five. Where there are two manuals, the lower is called the Great and the upper the Swell. In larger organs a third manual, called the Choir, is added below, and in even larger instruments a fourth called the Solo is placed below, the Swell and Great changing places.

At the two sides of these manuals are sets of Knobs,[1] which when drawn out render active the sets of pipes or registers connected with them. When they are pushed in, these pipes no longer respond to the keys of the manual. They are arranged according to the manual that controls them; the Great and Mechanical registers are usually arranged on the right, and the Swell and Pedals on the left. The various departments have knobs of different woods to catch the eye, Great of ebony,

[1] In many recent organs the register knobs have been displaced by horizontal keys or tablets, something like the perpendicular tablets used for couplers.

Swell of rose wood, Pedals of tulip wood, and Mechanical registers, such as Tremolo and couplers, of box wood. The knobs often have oblique faces to aid the eye to catch the names engraved upon them.

Above the Swell manual in recent organs is a set of tilting tablets controlling the coupling of the several manuals and the pedal clavier with each other, so that in playing on one manual the stops drawn on another with which it is coupled respond as well. There are also pistons that bring on certain combinations of stops without drawing out the knobs at the side. Some of these combinations are permanent, some adjustable.

(*b*) *The Pedal Clavier.* The pedal clavier consists of the great wooden keys which the feet play, the long ones corresponding to the white keys, and the short high ones to the short black keys of the manuals. Formerly they were straight and parallel, but in modern organs they are concave and radiate from a hypothetical center.

A little above the pedal clavier is the Swell pedal which opens and closes the shutters of the enclosure surrounding the pipes controlled by the Swell manual and so varies the force and gives expression. There is another pedal called the Grand Organ Crescendo which brings on gradually the whole power of the organ. In older organs there are Composition pedals which change the combinations of stops in Great and Swell. One pedal may bring in all the registers of the Great Organ and another push them all in but a soft voiced solo stop, this without the player lifting his hands from the keys of the manual. In recent organs the push buttons above the upper manual have largely taken the place of these Composition pedals.

3. The Great Organ

Having familiarized himself with the Key Desk or

Console, and all its intricate component parts, the student will wish to know what lies behind them.

The Great manual keys control the pipes of the Great Organ made up of strong organ tone and flute tone registers, supplying the foundation work, the great body tone of the instrument. Looking at the names on the knobs of the Great Organ registers, one finds Open Diapason, Dulciana, Melodia, Octave or Principal, Super-Octave, Mixture, with a few loud solo stops like Doppel Flöte, Gamba, or Trumpet. The loudness of the Great Organ can be controlled only by drawing or pushing in stops.

4. The Swell Organ

The Swell manual keys control the pipes of the Swell Organ, which is enclosed in a compartment, sometimes having a double wall, with the front arranged with shutters or folds which, being opened and closed, cause an increase or decrease of the force of the tones. These shutters are controlled by the Swell pedal already referred to. The edges of the shutters are felted to reduce the sound when they are closed. The Swell pedal mechanism is so arranged that the shutters will remain open at any point.

In a two manual instrument the Swell Organ contains the softer organ tone, and flute and string tone stops, and the varied solo stops. One finds on its register knobs the names, Bourdon, Salicional, Æoline, Stopped Diapason, Viola Diapason, Flute Harmonique, Flageolet, Clarinet, Oboe, Bassoon, Vox Humana and Vox Angelica.

This is the expressive department of the organ both in its voicing and in its variations of force. While the Grand Organ has strength, dignity, majesty, the Swell Organ has meditativeness, tenderness, and emotion.

5. The Choir Organ

The Choir Organ is enclosed in a swell box of its own. It contains soft voiced and solo stops and in general is gentler in tone than the Great, some of whose stops it duplicates with a smaller scale, that is, with pipes of a smaller diameter. It is not a miscellaneous collection of solo stops, but a well balanced, symmetrical organ. Dulciana, Melodia, and Stopped Diapason are transferred from the Great Organ, usually with smaller scales. Other stops are Geigen Principal, Lieblich Gedackt, Flute d'Amour, Piccolo and Clarinet. In general it is a Great Organ reduced in scale and given expressiveness for choir use.

6. The Solo Organ

In very large organs there is a Solo Organ which contains chiefly solo stops of unusual quality of tone, such as Keraulophon, Dolcan, Philomela, Prestant, Wald-Floete, Tuba Mirabilis. It has a swell of its own.

7. The Pedal Organ

The Pedal Organ provides the fundamental tones of the harmonic structure. It usually has thirty notes. In small organs the Bourdon, with the help of couplers with the lower two octaves of the Great, is considered ample. The 16 ft. Open Diapason is the fundamental stop for a moderate sized organ, with Bourdon, and Violoncello as variants. Only in the larger organs does the 32 ft. Open Diapason find a place, because of its wall-shaking power. With it goes the 16 ft. Open Diapason, Principal, Dulciana, all 16 ft. stops, and Violoncello, Gamba, Floete and Trombone, 8 ft. stops. For a softer bass for music on the Swell Organ, the Pedal can couple with an appropriate stop on the Great.

8. The Transmission

Having thus analyzed the key desk and what it represents, the student passes to the methods and mechanism that connect it with the pipes that give a voice to the organ. There are three forms of transmission or actions in use.

(*a*) *The Tracker Action.* In the Tracker Action the movement of the keys is transmitted to the valves of the pipes by purely mechanical means. As the key is pressed down, it affects a set of levers and trackers, which finally affect the valve of the pipe. Each of them must act in straight directions, but by means of squares or elbows, motion can be transmitted in any direction.

For small organs with few registers and only three couplers, the Tracker Action is quite satisfactory, but with a large organ with numerous couplers it becomes manual labour to play the full organ. The levers and especially the trackers are quite susceptible to damp, and in wet weather the tracker action is apt to be rather hard and stiff.

(*b*) *The Pneumatic Action.* The Pneumatic Action is based on the elasticity of the air. It has two forms. (1) In the one, air from the organ bellows, acting through a small bellows attached to each key, operates the Tracker Action, the pressure of the air relieving the labour of pressing down the key. (2) The Tubular-Pneumatic Action dispenses with the mechanism of the levers and trackers entirely, their place being taken by a small tube which passes from the key to the valve. Pressing down the key opens a valve which permits the air from a heavily weighted pneumatic bellows to pass through the tube to a separate disc-valve which is connected with the valves in the wind-chest.

No matter how large the organ, or how intricately it is

coupled, the touch of the tubular-pneumatic organ is very easy. With this action the Console may be located anywhere within 150 feet, but the weight of the tubes becomes a serious consideration. However, the action becomes slower in proportion to the distance of the Console from the body of the organ.

(*c*) *The Electro-Pneumatic Action.* The Electro-Pneumatic Action differs from the Tubular Pneumatic only in that, instead of the small tube passing from the key to the pneumatic valve action, there is an electric wire through which the current, opened by pressing down the key, lifts the armature of a magnet which is connected with the pneumatic valve action.

(*d*) *Drawstop Action.* The registers are brought into action by slides in the wind-chest which have holes for each pipe, which holes, when the stop is drawn, coincide with the holes in the channels. This slide is moved on the same principle as the valve, according to the action used, by leverage in the Tracker Action, by pneumatic pressure in the Pneumatic Action, by electromagnets in the Electro-Pneumatic Action. This is equally true of the Mechanical registers, the Couplers, the Combination pistons, the Tremolo Action and the like.

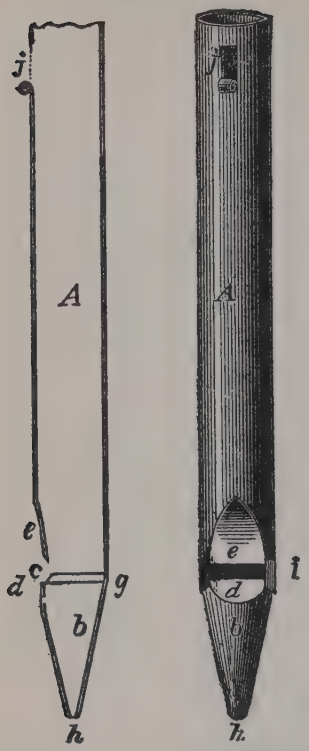
9. The Pipes

Pipes are divided into two classes: Flue pipes in which the vibration is originated in the air, and Reed pipes in which the vibrations originate in a tongue or reed, but are strengthened and enriched by a column of air enclosed in a pipe.

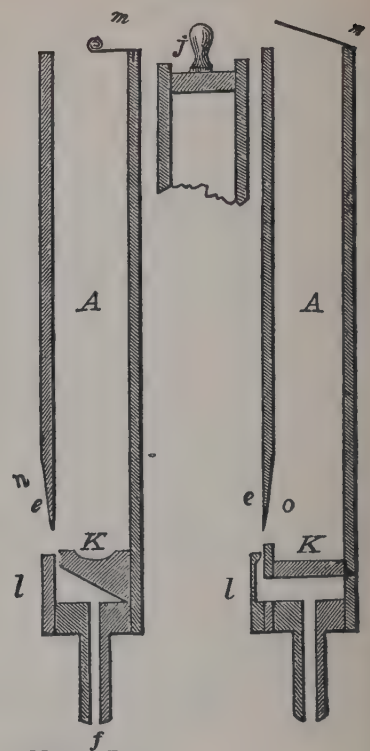
(*a*) *The Flue Pipe.*

(1) *The Material of the Pipe.* Pipes are made of metal alloys of tin and lead, or of zinc, or of wood. The greater the proportion of tin the brighter the tone. If

METAL PIPES



WOOD PIPES



PARTS OF THE METAL PIPES

A. The body of the pipe.
b. The foot for conveying the air.
c. The mouth of the pipe.
d. The lower lip.
e. The upper lip.
f. The flue, or air passage.
g. The language, dividing the body of the pipe from the foot.
h. The toe, or entrance of the wind.
i. The ears for steadying the wind.
j. The tuner.

PARTS OF THE WOOD PIPES

K. The block.
l. The cap.
m. The tuner.
n. Exterior bevel.
o. Inverted mouth.

the proportion of tin is forty per cent. or over, spots are produced in the crystallization, from which the quality of the metal may be inferred. When of metal, they are

cylindrical, when of wood they may be rectangular or triangular, as well as cylindrical. The wooden pipes controlled by the keys of the manuals in the best organs are made of spruce pine with hardwood front. The heavier pedal pipes are made of spruce pine, poplar or cypress. The pipes are tongued and grooved and glued together at the joints. The tone is improved by a generous inside coating of glue sizing, filling the pores of the wood.

(2) *The Formation of the Tone.* The flue pipe is of the same type as the boy's willow or whistlewood whistle. The air, blown in from the lower end, impinges on the upper lip of the opening on the side and creates an eddy that sets the column of air above it into vibration.

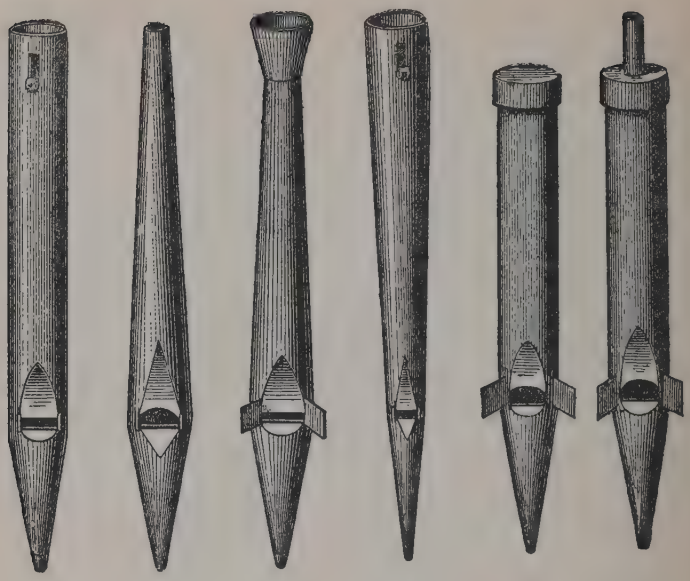
(3) *The Pitch.* The pitch depends on the length of the column of air above the opening. The standard of pitch for the manuals is the length of the pipe sounding the lowest C on the keyboard, which is eight feet. Hence all stops based on this standard are called eight-foot stops.

A pipe only half as long as that of the lowest C would sound an octave higher, and hence a stop sounding an octave higher than the standard is called a four-foot stop. A stop sounding still an octave higher is called a two-foot stop.

But if the end of the pipe is closed ("gedeckt," as the Germans say) or "stopped," the vibrations are thrown back and descend so that the four-foot pipe becomes the equivalent of an eight-foot pipe with a corresponding pitch.

Yet the pitch of a pipe is not absolutely determined by its length; the wind pressure and the temperature are factors to be reckoned with.

(4) *The Quality of Tone.* The quality of the tone of a pipe depends on the overtones, which are affected by a large number of different factors, among which are the



1 2 3 4 5 6

SHAPES OF METAL PIPES

1. Open cylindrical, whose body has the same diameter throughout.
2. Conical, the top of whose body has a smaller diameter than the mouth.
3. Conical with bell at the top.
4. Conical inverted, the top of whose body has a larger diameter than the mouth.
5. Stopped cylindrical, which has a metal covering at the top.
6. Half-stopped cylindrical has an open tube or chimney inserted in cap or covering.

material of the pipe, its diameter, its shape, the shape of the lips of the side orifice, and the shape of the upper end. By the proper manipulation of these, voicers not only produce diapason organ tone, flute tone and string tone, but numberless variations of *timbre* and colour that mark the extraordinary variety and resourcefulness of the organ.

(5) *The Shape of the Pipe.*

(*a*) Metal flue pipes take the following shapes:

Open cylindrical, of the same diameter throughout.

Conical, the top smaller than the mouth in diameter.

Conical with bell, the top flaring into a bell.

Conical inverted, the top larger in diameter than the mouth.

Stopped cylindrical, with a metal covering at the top.

Halfstopped cylindrical, with open tube or chimney in the covering.

(*b*) Wood pipes occur in the following shapes:

Rectangular,
Three sided,
Pyramidal,
Inverted Pyramidal,
Turned Cylindrical,
Stopped Rectangular,
Halfstopped Rectangular.

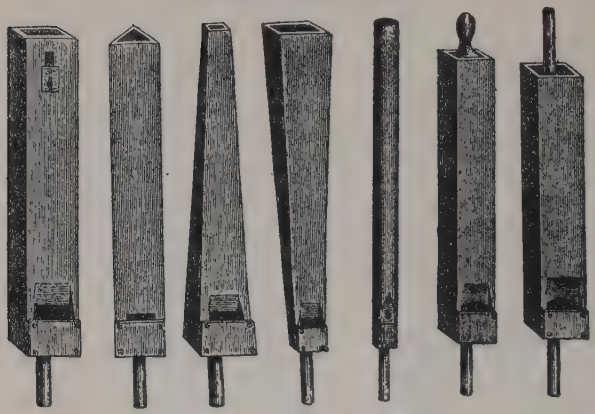
(6) *The Scale of the Pipe.* (*a*) The scale of the pipe is its diameter as proportioned to its length. A large diameter has a fuller tone than a smaller one. String-tone stops have small diameters, Open Diapasons the largest. The scale of the pipe diminishes with the rise of the pitch, but not as fast as the length; the diameter decreases one-half with every seventeenth note, while the length decreases one half with every thirteenth note.

(*b*) *The Reed Pipe.*

(1) *The Formation of the Tone.* In the reed pipe the vibration is produced by a tongue or reed, which is reinforced by the vibration of the column of air in the pipe above it, which is of a length corresponding to the pitch of the reed.

(2) *Two Kinds of Reeds.* Reeds are of two kinds: the free reed, in which the reed vibrates freely in its opening without striking the *eschallot,* or frame, and the striking reed which rests on its *eschallot* and vibrates on its flat surface. The free reed is little used.

SHAPES OF WOOD PIPES



1 2 3 4 5 6 7

1. Open Rectangular.
2. Open Triangular.
3. Pyramidal.
4. Inverted Pyramidal.
5. Turned Cylindrical.
6. Stopped Rectangular.
7. Half-stopped Rectangular.

REED PIPE

PARTS OF REED PIPE

a. Body of Metal.
b. Block of Metal.
c. Eschallot of Brass.
d. Reed of Brass.
e. Tuning Spring of Brass or Steel.
f. Boot or Socket of Metal.

(3) *The Tuning of the Reeds.* The tuning of a reed is done by a *tuning spring,* a wire which shortens or lengthens the vibrating portion of the reed and raises or lowers its pitch. The pipe must be tuned accordingly.

(4) *The Shape of the Reed Pipes.* Reed pipes are made of metal and are shaped very much as metal flue pipes. The lowest toned reed pipes are made of wood, four sided, pyramidal. Free reed pipes are usually made of wood.

10. THE QUALITY OF THE TONE

There are four distinct qualities of tone in the pipe

organ: (*a*) Organ or Diapason tone; (*b*) Flute tone; (*c*) String tone, and (*d*) Reed tone.

(*a*) *The Organ or Diapason Tone.* The Organ or Diapason Tone is particularly round and full, and does not approach the quality of any other instrument. It is represented by the Open Diapason, Principal, Dulciana, Fifteenth or Superoctave, and in the Pedal Organ by thirty-two foot Open Diapason.

(*b*) *The Flute Tone.* This quality of tone suggests that of its namesake in the orchestra. The mouth of the pipe, *i. e.*, the side opening, is sometimes cut high. It is represented by Bourdon, Stopped Diapason, Melodia, Clarabella, Doppel Floete and a host of other stops. The flute quality does not persist in the low bases, but the same proportional scale is used.

(*c*) *The String Tone.* The String Tone approaches more or less the quality of the stringed instruments of the orchestra. It has a somewhat incisive effect. The scale of these stops is usually small. Represented by Gamba, Æoline, Salicional, Violoncello, Viol d'Amour, and in the Pedal Organ by Violone and Gamba Major.

(*d*) *The Reed Tone.* The reed tone is somewhat sharp and incisive, due to its metalic origin, but is quite subject to the voicer's art, producing great variations of quality, from the blatant trumpet to the dainty Vox Humana. The more common reed stops are the Oboe, Clarinet, Trumpet, Vox Humana and in the Pedal organ Bombarde and Contra Fagotto.

II. Mixture, or Compound Stops

Where the full organ is called for, mere octaves are a little thin, and strengthening of the overtones is needed. This can be done by Mixture Stops representing those overtones, such as the Twelfth, Fifteenth, Seventeenth,

Nineteenth, etc.—all of which are so connected as to be drawn with a single knob. If too strong, they add shrillness to the tone, particularly so if the upper harmonics are present.

12. The Bellows

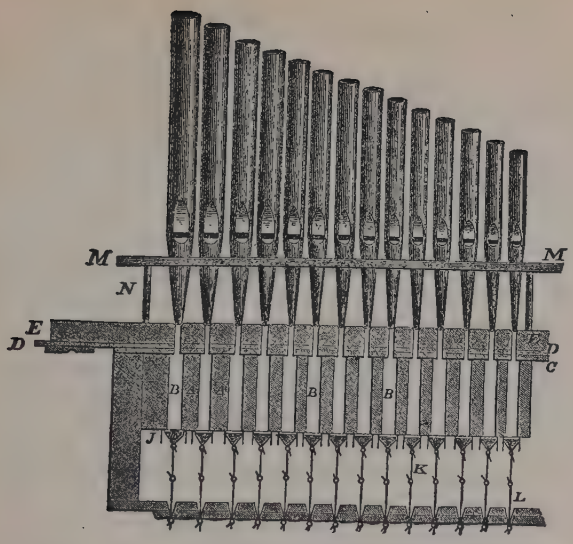
Need it be said that the supply of air is an important factor in getting proper results from an organ. As we shall see in our next chapter, it was a difficult problem in the development of the organ, which has been fully solved only in recent years.

(*a*) *The Parts of the Bellows.* The bellows consist of the feeders, collapsible structures with folds, that draw in the air, a wind-box that gives rigidity to the structure, and collapsible bellows at the top which, properly weighted, give a steady pressure to the air in the wind-box. The power is applied to the feeders. As the air is forced from the feeders into the wind-box or reservoir, it forces open valves in its bottom which close instantly when the pressure from the feeders is less than the pressure regulated by the weights on the collapsible top.

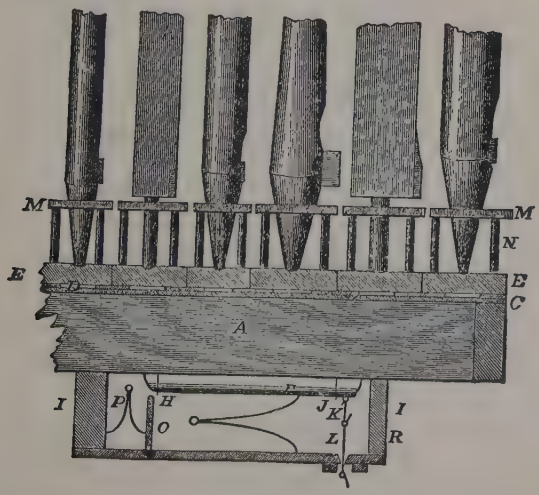
(*b*) *Organ Blowers.* In recent years the feeders have been replaced by organ blowers on the principle of centrifugal pumps, by means of which more air at a uniform pressure can be supplied. When these are used the reservoir or wind-chest may be very considerably reduced in size.

(*c*) *The Distribution of the Wind.* From the wind-chest wind-trunks distribute the air to the channels which carry it to the foot of the pipes. The entrance to the channels is controlled by pallets, or valves, which in turn are governed by pneumatic devices connected with the keys by one of the several actions.

There is a channel for every key on the several claviers.



Sectional view of a portion of the side of a Wind-Chest



Sectional view of a portion of the end of a Wind-Chest

The pipes of that particular pitch of all stops in the organ are connected with that individual channel. Drawing a stop connects every pipe belonging to it with its respective channel. If middle C is pressed down the valve between its channel and the wind-trunk is opened and all the middle C pipes whose stops have been drawn will sound. If this valve leading to the channel fails to close because of dirt or some small impediment, the pipe will continue to receive air through the channel and hence continue to sound. This unfortunate accident is called "ciphering."

There are details in this control of the valves that are very interesting mechanically, but lack of space forbids entering upon them.

REVIEW QUESTIONS

1. Explain the complicated character of the pipe organ.
2. What is the difference between the Key Desk and the Console?
3. Describe the manuals of the pipe organ, number, and arrangement.
4. Give the arrangement of drawstops and other controls.
5. Describe the Pedal clavier.
6. What other Pedal accessories are placed above the clavier?
7. Explain the character of the Great Organ.
8. How is force regulated in the Swell Organ?
9. What is the character of the stops used in it?
10. Name some of its stops in its several classes.
11. What is the relation of the Choir Organ to the Great?
12. What organs have a Solo Organ and what class of stops are placed in it?
13. Describe the Pedal Organ and its stops.
14. How many kinds of actions are used in pipe organs?
15. How does the drawstop operate?
16. How many classes of pipes are there? Characterize each.
17. Of what materials are they made?
18. How is the tone formed in flue pipes?

19. On what does the pitch of a pipe depend?

20. What is the basis of the differing tone quality of the various stops?

21. What are the shapes of metal flue pipes? Of wooden flue pipes?

22. What is the scale of a pipe and how does it affect the tone?

23. How is the tone produced in the reed pipe?

24. What is the relation of the reed to the length of its pipe?

25. How many kinds of reeds are used and how do they operate?

26. State how the qualities of tone are produced in the organ and their respective characteristics.

27. What are Mixtures? Give the principle underlying them.

28. Describe the bellows.

29. What parts are replaced by modern blowers?

30. How is the wind distributed to the individual pipes?

31. What is "ciphering," and how is it caused?

XXX

THE HISTORY OF THE PIPE ORGAN

Class Room Suggestions: This may be assigned for reading only.

Supplementary Reading: Williams, "Story of the Organ," Scribner's Sons, New York; Grove, "Dictionary of Music and Musicians," Art. "Organ," Presser, Philadelphia.

THE minister should not be ignorant of the history of the most perfect musical instrument man has devised. It is really due to his general culture to have a knowledge of its development.

1. THE BIBLE ORGAN

The use of the word "organ" in the Authorized Version is somewhat misleading as to the antiquity of the instrument. Jubal's "organ" was simply a pipe, or small set of pipes at most. Blowing into a hollow reed had made a pleasing noise. Soon it was discovered that the lengths of the reed affected the character of the noise, *i. e.*, its pitch. Jubal, as a fertile experimenter, conceived the idea of combining a number of reeds of differing lengths and so the germ of all wind instruments, including the modern pipe organ, was conceived. Jubal's organ, —Pipes of Pan or syrinx—had from eight to fourteen pipes and was with various modifications continued through the ages that followed. It may be accepted as the *ougab,* the "organ" of the English Bible.

Space fails us, or it would be interesting to mark the development of the various wind instruments known to ancient nations. It is sufficient to note that the develop-

ment was chiefly in the line of instruments that could be blown with the human breath.

2. The Development of the Pipe

Probably the first syrinx was closed at one end by the knot in the reed. It was therefore a "stopped pipe." By

A Panpipe, or Syrinx

some accident, or by groping experiment, it was found that if there was a slight slit in the knot and a hole in the other side of the knob, blowing through the knob also produced a pleasing sound, again modified by the

length of the pipe, but an octave higher than the pipe of similar length with the knot still closed. This "open pipe," similar to a boy's willow whistle, gave another great class of pipes in the modern organ.

3. The Reed Pipe

The next great step in the development of the musical tube was that the vibrations could be originated by a slight tongue which was set to vibrating by the breath playing upon it. From this were evolved the clarinet, the oboe, the bassoon, the bagpipe, and finally the "Reed Pipes" of the organ. Thus the fundamental ideas of the organ were very early established. It was simply a question of the necessary mechanism to exploit their possibilities in a large way.

4. Organs in the Pre-Christian Era

The Talmud[1] describes an instrument having a wind-chest containing ten holes with each of which ten pipes were connected. These one hundred sounds were controlled by a Keyboard. This instrument, called *magrepha,* is said to have been used in the Temple.

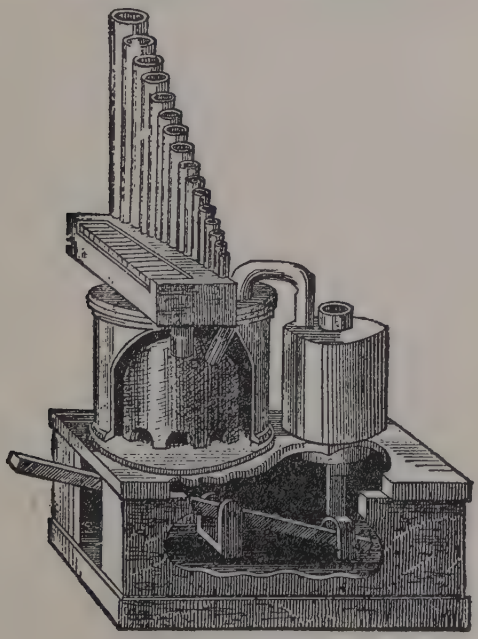
While we have no other authority to substantiate this account, it is not at all improbable, for in the third and second centuries before Christ, the Hydraulic organ was developed, anticipating many important features of the modern organ. It had nineteen pipes providing six tropes or scales. It was quite popular at gladiatorial shows and musical contests, Nero himself being a player on it. It fell under the ban of the Christian Church, as did all other instruments, because of its pagan associations. The smaller instruments being personal as well as portable, survived, but the hydraulic organ went out of general

[1] Mishna, Tr. Erachim, Chapter 11, Sect. 3, 5, 6.

use, and by the end of the thirteenth century had entirely disappeared.

5. Early Church Organs

The art of building organs was nearly lost, though traces of it appear occasionally. An obelisk erected by Theodosius before 393 A. D. shows an organ whose bel-



Hydraulic Organ

lows are operated by two youths standing on a pair of bellows. There was no keyboard. The speaking of the pipes in all the cases of this age known to us was controlled by the perforated slides managed by hand.

When the organ began to be used in church service is not definitely known. Jerome in 420 mentions an organ

in Jerusalem with twelve bronze pipes and fifteen smith's bellows, which could be heard from the Mount of Olives, a mile away. We may conjecture that it was placed in a church. In 450 it was in common use in the churches of Spain, according to Julianus, a Spanish bishop. There is mention of an organ in a nunnery at Grado in 580.

In 666 Pope Vitalian at Rome introduced the instrument to aid the singing of the congregation. The organ was used in England and the art of making them was known in the eighth century. It was introduced into France about the same time. Pepin (714–768) the father of Charlemagne secured one from the Byzantine Emperor, Constantine Copronymus the Sixth, as there was none in either Germany or France. It had pipes of lead. Charlemagne had a copy of it made in 812 for the cathedral at Aix-la-Chapelle. The French and German

A Portative and Lute

organ builders soon became very expert and had the reputation of making the finest organs in Christendom.

Small organs for personal and private use seem to have existed in the pre-Christian age and down through the centuries. They became quite common in the thirteenth century. They were called "Portative" organs, as they

could be carried about by the player. Some were small enough to hang from the neck of the performer, who worked the bellows with one hand and played on the keys with the other. As the pipes were short and of small scale, necessarily their pitch was very high.

A larger, but still movable, organ called a "Positive" was widely used in the Middle Ages. It is well represented by the part of the shrine painted by Hubert van Eyck found in the "Old Museum" in Berlin. It was somewhat larger than a cabinet organ and its pipes were displayed.

These "positive" organs were sometimes placed in different parts of a large church or cathedral, usually raised on little platforms high up on the side walls or even on pillars. They were called "swallows' nests." They were loud and screaming, and helped to control the singing of the congregation.

These small organs had keys even smaller than our own, and their bellows were quite practicable. They were used in chapels and small churches, and even privately in the castles of the nobility.

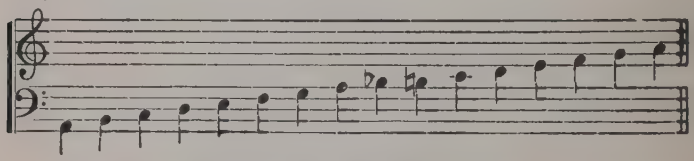
In the ninth century organs had become numerous in England, the builders there constructing the pipes of copper.[2]

[2] It will be interesting to note a description of an organ built for Winchester Cathedral in the first half of the tenth century, as given in a Latin poem by a monk of the name of Wulstan. "Such organs as you have built are seen nowhere, fabricated on a double ground. Twice six bellows above are ranged in a row, and fourteen lie below. These by alternate blasts supply an immense quantity of wind and are worked by seventy strong men, labouring with their arms covered with perspiration, each inciting his companions to drive the wind up with all his strength, that the full-bosomed box may speak with its four hundred pipes which the hand of the organist governs. Some when closed he

6. The Introduction of a Keyboard

With these tongues or slides, it took three men to play this Winchester organ. The keyboard of the hydraulus had passed into oblivion, but near the close of the eleventh century the germinal suggestion of it reappeared in the form of levers, hinge keys, which substituted a blow for a pull. These keys were three to five inches wide, or even more, an inch and a half thick, from eighteen inches to a yard long, with a fall of from ten to twelve inches. As springs had to be provided strong enough to force these keys back into position and close the valve by pushing the slide, one can understand that no weakling could be chosen organist.

These organs had sixteen notes, from A to A, including a lyrical "B♭."



In the eleventh century we find references to the use of

opens, others when open he closes, as the individual nature of the varied sound requires. Two brethren (religious) of concordant spirit sit at the instrument and each manages his own alphabet. There are, moreover, hidden holes in the forty tongues and each has ten (pipes) in their due order. Some are conducted hither and others thither, each preserving the proper point (or situation) for its own note. They strike the seven differences of joyous sounds, adding the music of the lyric semitone (B♭). Like thunder the iron tones batter the ear, so that it may receive no sound but that alone. To such an amount does it reverberate, echoing in every direction, that every one stops with his hand his gaping ears, being in no wise able to draw near and bear the sound, which so many combinations produce. The music is heard throughout the town and the flying fame thereof has gone out over the whole country."

a keyboard, in connection with a new organ at Magdeburg, Germany.

7. The Problem of the Bellows

With the size of the pipes used, and the degree of force thought necessary for church purposes, the bellows were a great problem. In the first place, the quantity of wind was important; the rude pipes would not function under low pressure. In the second place a steady pressure was needful to sustain an unvarying pitch.

The Hydraulus tried to solve the problem by means of water seeking its level in tanks, but that device had passed into the limbo of the forgotten. Their only recourse was to multiply bellows of the size ordinarily used by the blacksmiths. These were not manipulated by levers, as in the more recent past, but by treading them up and down, each man serving two bellows, raising one and depressing the other alternately by means of an iron shoe. We have seen that the Winchester organ required seventy men. The organ at Halberstadt had twenty bellows and that at Magdeburg twenty-four. Within the last half century there were still organs surviving in Germany that required organ treaders (Orgel-treter). The old organ in the Nicolai Kirche in Leipzig in 1890 still required the laborious efforts of four men.

8. Increasing the Loudness of the Organ

In the twelfth century the number of keys was increased, and, as if the din were not sufficiently great, two or three more pipes were added to each key, sounding the fifth and octave to the unison. It must be remembered that, when a key was struck, all the pipes connected with it sounded, and there was as yet no method of silencing

any of them. There could be no expression; it was one unending bellow.

One can therefore sympathize with the Latin and Greek clergy of the thirteenth century who deemed the

Treading the Bellows

use of the organ in divine services profane and scandalous. The disuse of the congregation singing, the habit of the choirs of singing the service and the motet *a capella,—i. e.,* without instrumental accompaniment—must have made the strident bellowing of the organ seem

out of place. The Greek Church still continues the ban imposed by the early Church against instruments. But in the Northern Church the organ continued its development. To B♭ was added F♯, C♯, E♭, and G♯ in the fourteenth century, completing the chromatic scale. The clavier, or keyboard, was enlarged to two octaves and a fifth, or thirty-one keys. This necessitated a reconstruction of the mechanism connecting the key and the valve, which was a great improvement.

9. Control of the Power of the Organ

Up to the middle of the fourteenth century the question had been one of power. The only progress that had been made was in adding pipe to pipe until ten or more pipes answered to a single key. In such an organ there could be no variation, no expression, no adaptation to varying needs. In 1361 there was built by a priest, Nicholas Faber by name (a name to be held in high honour by all who love the organ), an instrument that broke new ground. It introduced three manuals instead of one. The one manual controlled the main body of the organ and the pipes were placed in the back and hence called "Hintersatz." The second manual controlled the Open Diapason pipes which were placed in front; the third, the lower pipes of the Bass Diapason. The player could pound out the melody on the upper manual with one hand and a *discant* on the middle, or merely accompany the singing by using the open Diapason of the middle manual with one hand as a discant to the voices, and a bass with the other. The keyboards were also improved, the keys of one manual being lettered, and the chromatic notes, B♭, C♯, F♯, and G♯, being raised above the other keys and set back of them, thus practically anticipating our present keyboard. The di-

atonic keys were probably pressed down by the wrist end of the hand, and the chromatic keys by the middle fingers.

While the contrast between the upper and middle manuals was rather violent and did not yet allow for much expression, it opened out new possibilities.

10. The Invention of Stops

The next step was to get variation of sound on a single manual. This was secured in the fifteenth century by putting in a transverse slide by means of which a single set of pipes was shut off or connected with the air chest.

Two degrees of power having thus been assured from a single manual, the idea of securing more was not far to seek. In the fifteenth century, Timotheus, a German artificer, in rebuilding a monastery organ for the Bishop of Wuerzburg, separated the pipes of the *Hintersatz* or main organ into single sets of pipes, called registers. These registers (now called "stops") were given names: Principal 8 ft. (now Open Diapason), Octave 4 ft. (now Principal), Quint 2-2/3 ft. (now Twelfth), Superoctave 2 ft. (now Fifteenth).

The mechanism by which this result was secured need not be described here. Suffice it to say that while it was ingenious and produced the desired result, it was very complicated and easily put out of order. It was later (circa 1525) replaced by the present much simplified system.

11. Securing Varied Quality of Tone

Up to the fifteenth century only pipes of a single quality of tone had been used. Hence while variation of quantity of tone had now been secured by the individual registers, there was still a monotony of quality. Given a number of sets of pipes that could be made to speak inde-

pendently, the desire to vary the quality was sure to arise. The pipes had all been open, metal, cylindrical, and of full proportionate scale, or size. Experiments were made by variations in all these particulars. The open pipe was stopped at the upper end, reducing its pitch by one octave, and softening the tone. Thus originated a whole family of stops: Stopped Diapason, Bourdon, Gedackt (gedeckt-covered) and many others.

Pipes of small diameter were used and so treated as to produce what is known as a string tone, giving character to another family of stops, such as Gamba, Viola, Violone, etc.

The shape of the pipes was changed, either flaring at the top or tapering, and the mouth at the side raised, producing the horns and flutes such as Gemshorn, Harmonic Flute, Hohl Floete.

The use of reeds was also introduced in this century, thus completing the four families of tones—Organ, Flute, String, and Reed. The Trumpet, Trombone, and Vox Humana were discovered and used.

12. The Improvement of the Keyboard

The keyboard had been a clumsy, monstrous device up to this time, calling for great strength and almost violent exercise. The keys being three or four inches wide, no chords could be played with one hand. The width of the keys was gradually reduced so that before the close of the fifteenth century an octave was only about one note wider than on the present keyboard.

The diatonic and chromatic keys were combined in one keyboard, very much as they are now. At first the chromatic keys were overlaid with ivory, and the diatonic with ebony. Our present black and white keys were established at the close of the eighteenth century.

13. The Invention of the Pedals

Another great improvement in the fifteenth century was the invention of the pedals. Their compass was only one octave and did not include the chromatic tones. They were used only with long sustained notes. The actual originator of the pedals is not certainly known. Traxdorf of Mainz and Berndorf of Venice are mentioned, but that there were pedals in use prior to their time is fairly certain. They probably only added important improvements. In 1418 we find independent pedal pipes, lengths of sixteen feet and thirty-two feet coming into use. About the beginning of the sixteenth century the slide sound board now in use took the place of Timotheus' spring sound board.

14. The Luebeck Organ

In 1518 a typical organ, containing all the improvements that had been made up to that time was opened at the St. Mary's Church, Luebeck. It had manuals from D to A above the treble staff and a separate pedal down to C. It had thirty-two foot and sixteen foot pipes of English tin. Nearly two hundred years later (1705) J. Sebastian Bach walked fifty miles to hear it played by Buxtehude, the great Danish organist. Two years earlier Handel applied for the position of organist of one of the other churches of Luebeck; but when he heard that the successful candidate was expected to marry the daughter of the late organist, he declined to compete! Both Handel and Bach certainly heard Buxtehude play on this organ, and, it may be, played upon it.

15. Recent Improvements

We find, therefore, that by the opening of the sixteenth

century the main development of the pipe organ had taken place. Succeeding centuries brought additional stops and keyboards. The expressional value of the organ, already greatly developed, was made greater and more delicate by the introduction of the swell by Jordan (1712) in the church of St. Magnus in London. In 1726 Paris and Byfield began the system of couplers in an organ in Bristol. The Swell idea was applied to the whole organ in 1790 by Samuel Green at St. George's Chapel, Windsor. This idea is still used by some American builders.

The bellows had been the weak point in the organ from the beginning, the Hydraulus of ancient times being a recognition of this difficulty. Pitch and power of tone both varied with the wind pressure. In 1762 a clockmaker by the name of Cummings made a fairly successful approach to the solution of the problem by a combination of a feeder and a reservoir. This has been greatly improved in the meantime. In later years rotary and kinetic organ blowers have come into use.

In 1852 Dr. Gauntlett conceived the idea of substituting an electric system to take the place of the cumbrous, and in large organs almost impossible, tracker system which had the additional weakness of being very susceptible to humidity. But he could get no recognition for his ideas, although he had them patented. It was not until 1867 that an electric organ was built in the church of St. Augustine in Paris, after which the system came into vogue in England. Booth in 1827, Barker in 1832, and Hamilton in 1835 had already brought into play the use of pneumatic pressure, but the principle was not practically applied to the whole action until 1867. Many other improvements in all parts of the organ have since been made, especially in voicing, but they are so detailed

and so purely mechanical that the student must be referred to extensive treatises upon the subject.

It was noticed that in the mediæval contrapuntal development the initiative came from the South, but reached its culminating point of excellence, either in the North, or under the influence of northern theorists and composers. The first organ in the North came from Constantinople, but the development of the instrument into a noble expression of divine praise was due again to the erstwhile barbarians of the North.

REVIEW QUESTIONS

1. What was the "Organ" of the Bible?
2. What was the probable development of musical pipes?
3. How was the reed pipe developed?
4. What organs were used in the centuries before Christ?
5. Why did they not survive after the beginning of the Christian era?
6. What traces of the organ do we find in use in church service before 800 A. D.?
7. When did organs become numerous in England?
8. How were organs played in its early history?
9. What was one of the chief problems in the development of the organ?
10. What increase in the number of pipes was made in the twelfth century, and with what effect?
11. Why did some of the clergy object to the organ?
12. What important progress did the monk, Nicholas Faber, achieve in the fourteenth century? How was it utilized?
13. What further development was due to Timotheus in the fifteenth century?
14. What other important improvements were made in this same century?
15. By what date had the main features of the pipe organ been developed?
16. What important improvements have been made since and by whom?
17. What correspondence is there between the development of counterpoint and of the pipe organ?

XXXI

THE DEVELOPMENT OF ORGAN MUSIC

Class Room Suggestions: If this chapter is not limited to reading merely, it would be interesting to have some skillful organist secure and play typical music of the several periods of organ music.

Supplementary Reading: C. F. Abdy Williams, "The Story of Organ Music," Scribner's Sons, New York; Ritter, "Geschichte des Orgelspiels," 2 vols., Hesse, Leipzig; Pirro, "Johann Sebastian Bach," Schirmer, New York.

In this day and generation there is no other instrument that is heard played by competent and even professional players so much and so often as the pipe organ. Leaving out of consideration its use in theaters and picture shows, it is as constant and nearly as conspicuous in church services as the human voice, whether in speech or song. The minister, among whose resources the music of this instrument is a most important element, ought to be conversant not only with its origin and the course of its development but also with the compositions which are immediately available for his carefully planned orders of service.

The present chapter, despite its unavoidable technicalities, is by no means, therefore, the least important in this general discussion, and should be carefully studied and made a part of the musical furniture of the minister's mind.

1. Music of the Hydraulus

The hydraulic organ, or hydraulus, used for some

centuries before the Christian era and decreasingly so after it, was described in the previous chapter. It was a well developed instrument with a keyboard and different registers or stops. Its music was rhythmical and had varied power, loud and soft. The rhythm and *tempo* were frequently changed and the execution was often rapid and brilliant. There was no harmony, perhaps at most a droning note like that of a bagpipe. The instrument did not have available wind pressure to sustain a chord. Indeed, harmony was unknown to the ancients and would have been painful to them. The keys were somewhat larger than our present standard and none of them were raised, or black, like our five chromatic keys in every octave. The playing upon this instrument was considered a high accomplishment, the Emperor Nero priding himself on his skill upon it, frequently playing in public.

Claudian, the Latin poet of the fourth century, refers to the player's skill on the hydraulus as follows:

> "Et qui magna levi detrudens murmura tactu,
> Innumeras vocas segetis moderatus aenae,
> Intonet erranti digito, penitusque trabali,
> Vecte laborantes in carmina concitat undas."[1]

Some of the early Greek Philosophers taught that music, which in that day, of course, was mere melody, played on an instrument, without words, was a mere succession of meaningless sounds. The value of instruments lay solely in their help in sustaining the voices, in their estimation.

[1] "Who with light touch produces great sounds, calls forth with wandering finger the innumerable voices of the brazen crop (pipes), and, through a beam-like lever within, rouses the labouring waters into song."

2. The Instinct for Form

It was the constant and age-long striving of composers to make instrumental music significant, and they gradually found the solution of the problem in developing structure and form. Rhythm defined the structure of details, creating phrases. Form is the structural element of a whole composition working through modulation and contrasts of keys, and through the grouping of the periods and sections marked by cadences less or more final. The evolution of this architectonic element in music has been very slow and has reached its culmination in our own day. The recent emphasis of free form is evidence of a reaction against it. But the present high estate of music has been won by the development, century after century, of form, general and detailed.

3. How Instrumental Music Appeals

In seeking a reason for the existence of instrumental music, Mr. Williams in his "Story of Organ Music," on which the writer has leaned rather heavily in preparing this rapid survey, comes to the following conclusion: "Instrumental music appeals in three ways to the listener: (1) to his astonishment or admiration through the agility of the performer, (2) to his intelligence through its scientific construction, (3) to his emotions through the sentiment that may be inherent in the composition, or in its manner of performance. The best results are obtained by a happy combination of all three. If the first predominates, or entirely excludes the others, the music descends to the level of a clever performance on a tight rope or any other gymnastic exercise which astonishes; if the second only, the music is apt to be called dry, though this is not necessarily the case; and

if only the third feature is present, the music becomes mawkish and sickening."

The development of organ music in a general way passed through these three stages: (1) noisy, brilliant, merely nerve exciting display, (2) in merely intellectual problems and puzzles in elaborate counterpoint and polyphony, (3) in seeking such successions of tones and chords that would express sentiment and emotion.

4. The First Stage of Organ Music

The earliest organ composers, with no definite art forms to guide them,—for the dance music played on other instruments was not fitted for use on the organ,—groped blindly, content to astonish with noise and later with meaningless cascades of runs and trills and turns. While the organ was used in many of the churches of Christendom from the eighth century on, it was so rude and clumsy, as we have seen in a previous chapter, that its only use was to support the singing of the Plain song by the choir, and by the congregation where it was still permitted to share in the service of song. Its other incidental use was to make a noise and so attract people to the church services, just as even in our own day bells are rung.

The composers were handicapped by the prevalent church modes or hexachords which gave little opportunity for expressiveness or variety of tone colour, such as is afforded by our modern scales. They had no black keys to play on, their modes recognizing only B♭ instead of our five chromatic tones; so no modulation to other keys was possible. The laws governing the structure of phrases and periods were yet to be formulated, although by native rhythmical instinct, they sometimes obeyed them. It takes no great musical insight to perceive how

monotonous and inexpressive the result must have been. The period preceding the middle of the sixteenth century has left scanty remains of organ compositions and they have no artistic value to us. They are interesting chiefly as showing the toilsome way through which our present efficient organ music has come down to us.

When the early organists desired to play solos on the organ they usually used current madrigals, motets, and other compositions, simply playing the voice parts. Later they learned to embellish them with all manner of ornamental passages, known as "colorato."

Perhaps the best representatives of this *bravura* school was Francesco Laudino (1325-1390). Astonishing descriptions have come down to us of his skill and of the effects he produced on his hearers. A later organist of repute was Antonio Squarcialupo, nearly a century later, of Florence, an intimate friend of Lorenzo the Magnificent, the fame of whose playing went out into distant countries. Neither of these men left any music by which we may judge with what materials they so charmed their contemporaries.

5. The Second Stage of Organ Music

As the contrapuntists increased in skill and in the composition of masses, motets and madrigals, organ music inevitably reflected the progress, and passed out of the mechanically florid manner into the more intellectual application of counterpoint. This was initiated in Venice by Adrian Willaert (1490-1562), the famous Flemish *maestro*. He not only had two choirs, but introduced the organ as an essential part of the choral service. The first book of organ music, "Ricercari, Motets, and Canzoni," was published in 1523 by Marco Antonio di Bologna, which preceded the books of Willaert and

Buus, his associate organist, by twenty-six years; but there is no doubt that the advance was really due to the Flemish masters of Venice.

The word "tablature" occurs in this first book of organ music and appears for centuries to come. Its synonym may be said to be "short score." The voice parts were written in full score, *i. e.*, each voice had its own staff. The average organist of any age would find it difficult to play polyphonic music in open score, and hence it was a great convenience to have them condensed on two staffs,—the treble staff for the right hand, and the bass staff for the left.

These "Ricercari" were contrapuntal in style, and all the arts and devices of counterpoint were applied to them. They were very lengthy and elaborate and later developed into the fugue. The "Canzona Francese" was a simpler form, based on the French Chansons, and approached the song form. The "Toccata" was also invented about this time. It was in the nature of a lively prelude to more serious playing, and was brilliant and florid. Wasielewski in his "Geschichte der Instrumentalmusik" says of these "Ricercari," "The impression they produce is essentially wearisome and dry and monotonous. They are generally of great length and they sound like troubled, uneasy successions of notes, wanting in contrast of subjects and strength of ideas; the eye is more satisfied than the ear."

It may well be that in their extempore playing these early composers developed more interest and animation, else how could they have produced the popular effects that are reported to us by contemporary writers?

A later organist of St. Mark's, Venice, Claudio Merula (1533-1604) is notable for showing more originality of themes in his organ compositions, leaning less heavily

on motets and madrigals. He varied the note values more than had his predecessors who had written long successions of equal notes. His harmonic progression was more artistic and less monotonous.

Palestrina (1514–1594) wrote little for the organ, leaving a single volume of Ricercari in manuscript form, all dominated by the church modes, although instances occur of modulation into the related keys.

More important were the organists of St. Mark's, Venice, Andrea Gabrielli (1512–1586), teacher of Leo Hassler and Peter Sweelinck, and of his nephew, Giovanni Gabrielli (1557-1612), who in turn was the teacher of Schuetz, Graun, and Prætorius. Andrea was a pupil of Willaert and so fell heir to the traditions of his later position. Giovanni was an even better contrapuntist than his uncle. They naturally modelled their organ music on that of Willaert and Buus, but showed marked advance in their fugal construction.

Important are the two volumes of "Il Transilvano," issued by Girolamo Diruta (1560–?), instruction books for organists regarding notation, fingering, registration, etc. It is noteworthy that the thumb was not used until Bach's time. The book contains Toccatas, Ricercari, and Canzoni by all the leading Italian organists of his day. These, with his instructions, reveal the general musical situation of Central and Northern Italy in his age.

6. The Third Stage of Organ Music

Up to this time we have been passing through the intellectual, constructive period. With Girolomo Frescobaldi (1583-1654) we begin the striving after expression. Undoubtedly the influence of Monteverde, the antagonist of the old cramping polyphonic modal system, and the protagonist of the new harmony,

of the new modern scales, of the new expression, was felt by him. His contrapuntal themes were fresh and forcible. In his harmonies he sought expression and colour, though often crude and inconsequent. The writers of hymn voluntaries to-day were anticipated by Frescobaldi, who used even secular melodies as the basis of some of his organ compositions.

He varied the forms of his organ music writing not only Ricercari, Canzoni, and Toccatas, but Partite, Correnti, Baletti, and other styles, based on vocal forms.

His influence on later organ music was of supreme importance, as he introduced an aggressive, innovating element that sought to give inner significance to the instrumental music of the church. He was the first to give directions as to the playing of his music in order to secure the needed expression.

His fame was so great that when he played in St. Peter's in Rome in 1614, thirty thousand people gathered to hear him.

There were a number of organists in various parts of Italy who wrote organ music in the new style during the following century, but presently the fire burned low, for musical talent turned to the writing of operas, which absorbed all the popular interest in music. Of recent years some good writing has been done by Capocci and Bossi, but their compositions have had no influence outside of Italy and they need not detain us.

7. Organ Music in Germany

The period of mere nerve exciting and admiration winning playing in Germany is represented by Conrad Paulmann (1400–1473) of Nuremburg, a contemporary of Squarcialupo and apparently his equal in winning a high standing at court. He issued a book, "Funda-

mentum Organizandi," on extempore playing, which gives an insight into the instruments used and the ideals accepted by organists of that time.

Other organists of this period were Hofheimer and Luscinius of Vienna.

An even more important figure is that of Arnold Schlick (1460–?) who was also a blind man, as Laudino and Paulmann had been. He was the author of the oldest printed German organ collection. He is a distinct advance on Paulmann. The pedal is used by him as an independent bass part. His melody, or Cantus Firmus, is often the highest part, and, when desirable for greater concord, he changes it. While he uses the Dorian mode, he introduces B♭ and C♯, thus anticipating the modern D minor scale. He uses deceptive cadences and his final closes are formed with a dominant major chord, as is done at present.

He also uses the triad of A♭, badly out of tune with the old system of tuning, but perfectly concordant when the instrument is tuned according to the Equable Temperament system now in vogue. Either he had heard the advocacy of this system by Bartolo Ramis, a Spaniard, thirty years before at Bologna, or he had independently discovered it. He also published a book on organ building which marks notable advances.

There was endless confusion in the notation of the German tablatures for the organ during this period. Some had a five line staff for the right hand but simply a system of figures for the bass; others had simply figures for both hands surmounted by signs indicating length of note;[2] others still had five lines for the right hand and

[2] It is strange how long this figure system obtained in Germany. The writer has in his possession a little booklet used in the village school by his mother *circa* 1838 in which there is one line, on

an indefinite number for the left. This senseless confusion was continued in Germany long after a standardized notation had been established everywhere else in Europe.

The Italian style of "colorato" now invaded Germany and for nearly half a century debased German organ music and submerged the advances made by Schlick.

The last of the colourists was Johann Woltz of Heilbrunn. He issued a book in 1617, "Nova Musices Organicæ Tabulatura." While he is still a colourist, he uses more discretion and restraint, has fresher figures and disregards stock turns and figures that had become stale. He deprecates the German tablature or system of notation and advises organists to adopt the Italian, or standard. Instead of describing compositions in his collection by church modes, he gives the fundamental of the final chord, which is the keynote of its scale, as with us. His own music is no longer thin, but is rich with full sounding harmonies.

In the meantime the German Reformation had brought in the new Lutheran chorales which the people sang with unfailing gusto and enthusiasm. Organists were not slow to take advantage of this interest in the chorales and introduced them with preliminary passages, based on the tune to be sung. These developed into short organ movements which the extemporizing organist, or the composer, enriched with all the resources at his command. This new form of organ music was very popular with German church composers and had a large influence on later organ music.

Samuel Scheidt (1587–1654), a pupil of Sweelinck of Amsterdam, who had been a pupil of the elder Gabrielli

which and on the space above and below it, were the figures of the octave, each space and the line representing a separate octave.

at St. Mark's, Venice, issued his "Tabulatura Nova" in 1624 in which the chorale is treated in pure organ style. It had many other points of progress and marked and made a distinct advance in German organ music. The advance was evident not only in the music, but in the instructions he gave for the conduct of the musical part of the service and in the management of the organ itself.

The Lutheran Church service gave more time to organ music than the Roman, and in response to this opportunity the Germans advanced more rapidly than the Italians, who were having their musical energies deflected to the opera.

The musical *tempo* in Germany was accelerating during the seventeenth century, as it should, approaching a great climax. Heinrich Scheideman was another pupil of Sweelinck, and when he died in 1663 his post as organist of Hamburg's great St. Catherine's church was taken by Reinken. Reinken had such a great reputation as an organist among his contemporaries that Johann Sebastian Bach made two journeys to hear him.

Dietrich Buxtehude (1637–1707), organist of the Marien-Kirche of Luebeck, was another organist of great note, whom young Bach walked fifty miles to hear play. He led the way in unifying the fugue by drawing his material for subsequent subjects out of the first. His harmonies are bold and full of striking colour. Although his organ was tuned on the old system, he defied its discords in working out his wide sweeping modulations.

In South Germany we have Hans Leo Hassler (1564–1612), a pupil of the Gabriellis of Venice, who was distinguished as an organist and a composer. Kindermann, Schlemmer, Pachelbel, were shining examples of the progress of the German organ music. Pachelbel is conspicuous because of his development of the chorale pre-

ludes and interludes and his elaborate fugues based on the melody of the chorale. Johann Jacob Frohberger (1610–1667) is of importance chiefly because of the influence he had through his music on the development of Bach, who copied out some of his composition by moonlight, as he could find no other opportunity.

Perhaps the greatest of the South German Catholic organists was Georg Muffat (1645–1704). He had a varied experience in Paris, Strassburg, Rome, Salzburg, Passau. His music is esteemed by high critics as equal to that of Buxtehude, his northern contemporary. His Roman experience and French training and Southern German blood made an admirable combination of spontaneity and grace, of great learning, and of appeal to both thought and sentiment, which is so noticeable in his music. Ritter says that "in the toccata he surpasses all previous German masters except Buxtehude, who died some seven years before him, and whose powerful use of the pedal makes up for the want of Muffat's warmth of colour. He is the first who takes us out of the realm of mere sound and tone quality into that of soul-inspiring music."

So here we have passed in German organ music the three periods of organ music that we found in Italy, (1) the noisy, brilliant, merely nerve exciting display, (2) the merely intellectual problems and puzzles of elaborate counterpoint and polyphony, and (3) seeking such succession of tones and chords as would express sentiment and emotion. We found an abundance of (1) and (2) among the Germans, but their somewhat mechanical mind did not yield much of the (3) until we reach Muffat. Now we shall reach a great composer in whom all three find expression in a perfect blending, such as presents itself in no other organ music composer.

John Sebastian Bach (1685–1750) belonged to the

great musical family located in Thuringia, the same region which had produced Martin Luther, two centuries before. He was a man of considerable general education, despite his precocity in music. From youth up he was characterized by an insatiable greed for hard work, as may be gathered from the fact that he copied out by moonlight a book of organ music which his older brother had forbidden him to use. It illustrates German arbitrariness that when his brother discovered the copy, he confiscated it!

Part of Bach's success was due to his intimate knowledge of what preceding composers had done. His visits to Hamburg to hear Reinken play, to Luebeck to hear Buxtehude and his great organ and the "Abendmusik," a sort of musical vesper service, an old Luebeck institution that Buxtehude had brought to a high degree of perfection, and to Celle, attracted by the great reputation the Ducal Band there had won by its playing of French dance music, indicate his consuming interest in the best music Germany afforded.

His industry is something stupendous. His work in the writing of oratorios and cantatas of which consideration was had in a previous chapter would have been an abundant life-work for most composers. That was in line with his duties as cantor in the St. Thomas Kirche in Leipzig; but in addition there have been handed down no less than nine volumes of organ music, containing sonatas, passacaglia, preludes, fugues, toccatas, fantasias, canzoni, choral vorspiele, concertos, all of unfailing freshness and originality, as well as of scholarship and skill.

In industry, and in the amount of music written, he had equals in his own generation, for Telemann in Hamburg wrote literally thousands of compositions, and Handel in London, with his scores of operas and of

oratorios, was not far behind him. But Telemann had little freshness or originality, and no depth, while Handel not only constantly used material from his own previous works, but incessantly plagiarized the compositions of others. But the fertility of Bach's mind was such that it poured out an incessant stream of ever fresh, ever original ideas. He used the forms that had been handed down, but filled them with new ideas, new effects, new combinations, with a prodigality unexampled elsewhere. He touched the old seemingly outworn forms and they grew in beauty and expressiveness under his pen. Everywhere there is progress; everything reaches its consummate flower of perfection.

While no small part of Bach's music is still in the intellectual stage, and is interesting to the eye of the technician rather than grateful to the ear of a lover of music, it is astonishing how much of emotional expressiveness he attains in some of his technical *tours de force.* Played as one often hears Bach's fugal work, one can sympathize with the musical vicar of a London church who declared, "I do not like to hear Bach's music played in church; it sounds to me as if the Devil had broken loose on the organ." But in many of his organ pieces, and particularly in his cantatas, one finds a depth of feeling, a profound realization of the inner values of the texts he set, that can be found nowhere else, unless we except Handel's "Messiah."[8]

[8] Space forbids an adequate treatment of this great composer for the organ. The student should carefully peruse the articles in Grove's "Dictionary" on "Bach," "Oratorios," "Cantatas," and Dickinson's chapter on Bach in his "Music in the History of the Western Church" in order to get an adequate idea of his importance and influence. C. F. Peters, and Breitkopf and Hertel, both Leipzig music publishers, have complete editions of his works.

While Bach used all that was best in the Italian style, he was too Germanic and strong for the age in which he lived and for those that succeeded. Italian flippancy and superficiality reigned supreme all over Europe, not excepting Germany itself. He did not come to his own until in the early part of the nineteenth century Mendelssohn in Germany, and Samuel Wesley in England, by persistent propaganda called belated attention to his work.

After Bach's time organ music degenerated in Germany as far as technique and progressiveness were concerned. His son, Friedemann (1710–1780) was the greatest organist in Germany in his day, but lacked his father's industry, preferring to extemporize, and wrote little. Not until J. C. H. Rinck (1770–1846) began writing was anything noteworthy composed, and the shadow of the great Johann Sebastian Bach lay upon him. As he said, "Bach is a colossus who dominates the musical world; one cannot hope to follow in his footsteps for he has exhausted everything in his domain. I have always considered that if I am to succeed in composing anything worthy of approval, it must be on different lines from his."

His "Practical Organ School" was a standard work for nearly a century. Although a pupil of Bach in the second generation, he departed from the fugal style of the master; but what he wrote was dignified, churchly, and above all practical, and his music is still in general use.

Mendelssohn (1809–1847) was a virtuoso on the organ, as well as on the piano. His extemporization roused great enthusiasm in England, as well as in Germany, because of its technical excellence and its effectiveness. He wrote six organ sonatas which are classics in organ literature, besides three preludes and fugues.

August Gottfried Ritter (1811–1885) wrote organ sonatas, choral vorspiele, fugues, and variations, but is still best known by his exhaustive history of organ playing, "Geschichte des Orgelspiels."

A more important organ composer was Joseph Gabriel von Rheinberger (1839–1901), Court-Capellmeister at Munich, who wrote a series of organ sonatas of an artistic value equal to anything written for the modern orchestra. He is fertile in invention, a master of counterpoint and the fugue, yet modern in spirit. Perhaps no name appears on the order of service of leading city churches of this country as often as that of Rheinberger.

8. Organ Music in Other Countries

(*a*) *Organ Music in France.* There is little in the history of French organ music that need arrest attention. It followed somewhat the same course as in Italy and Germany, except that it has no composers of the calibre of Buxtehude and Bach, and that in general its music was more suave and graceful, more definitely calculated to please the congregation for which it was to be played. Such names as Titleouze, Gigault, Raison, le Begue, De Chambonnieres, Couperni, Marchand, Rameau, de Celles, mark the pleasing path of its development. During the last century the following composers have done pleasing although not strong work: Louis Lambillotte (1797–1857), Louis James Alfred Lefébure-Wély (1817–1869), Cæsar Auguste Franck (1822–1890), Charles Camille Saint Saëns (1835–1921), Francois Dubois (1837–), Felix Alexandre Guilmant (1837–) and Charles Marie Widor (1845–).

The most widely known of these is Guilmant, whose compositions are much used by American organists.

Widor has written in somewhat larger forms and his name is only occasionally seen in orders of service.

Antoine Edouard Batiste (1820–1876) wrote some very popular organ pieces which have, however, been severely criticised for their frequently florid and almost frivolous character.

(*b*) *Belgian Organ Music.* The most prominent recent Belgian composer of organ music is Nicolas Jacques Lemmens (1833–1881), whose name is only occasionally seen on American programs.

(*c*) *Dutch Organ Music.* In the record of the Dutch organists only three names stand out as important. Jan Pieterszoon Sweelinck (1562–1621), Anthony van Noordt and Simon van Eyken (1822–1868). Of these the first only need detain us. He is reputed to have been a pupil of the elder Gabrielli of Venice, although that is denied. That he was a great organist and the teacher of great organists is not in question. He was called the great "Organist-maker." He had a great influence in northern Germany and was one of Bach's musical ancestors, so to speak.

(*d*) *Organ Music in England.* There were a number of reasons why organ music did not develop in England as rapidly as on the Continent. The English service does not give the organ the same opportunity as do the Roman and the Lutheran. The Puritan prejudice militated against it. The Boethian unequal temperament tuning held sway in England longer than elsewhere and handicapped composition by its narrow range of possible tonality. The vocal music through the choirs overshadowed instrumental development.

The names of organ composers are in general the same as those met in studying the psalm tune and the anthem: Tallis, Tye, Byrd, Bull, Orlando Gibbons. These all

wrote in the contrapuntal style prevalent in Northern Europe and handed down in the vocal writings of the Netherland masters. With Humfrey, who, as we have seen, studied under Lully at Paris, the less studied and more melodious Italian influence comes in, which is more or less perpetuated in Purcell. This was encouraged by Charles II, who, both by his pleasure-loving disposition and his experience abroad, was inclined to favour the more popular style.

Purcell wrote some excellent music very much akin to that of Bach in its freshness and wealth of resource, although Bach had not yet begun writing. He was fully established in the modern use of the key as the unifying element. While he professed to be a follower of the Italians, in spirit he was more or less German.

His own statement of the situation is illuminating: "Music is but in its nonage, a forward child, which gives hope of what it may be hereafter in England, when the masters of it shall find more encouragement. 'Tis now learning Italian, which is its best master, and studying a little more French air to give it somewhat more of gayety and fashion. Thus, being further from the sun, we are of later growth than our neighbouring countries, and must be content to shake off our barbarity by degrees. The present age seems already disposed to be refined, and to distinguish between wild fancy and a just numerous composition."

Handel wrote very little music for the organ alone, quite a good deal for the organ and orchestra, none of which has survived to the present day; indeed, it had little to do directly with the further progress of organ music in England. Rather than a help or inspiration, he overshadowed church music, including organ music, and stifled the impulse to compose.

In place of the contrapuntal compositions there now came in the solo with the Cornet or Vox Humana stop and a mere accompaniment. Many of them had only two parts, the solo and the bass often two octaves apart.

The next notable composer was Samuel Wesley (1766–1837), son of Rev. Charles Wesley, the great Methodist hymn writer. He was a powerful extempore player. He wrote eleven concertos and a great number of voluntaries, preludes, fugues and interludes. He helped to restore English organ music to its former solid basis after a long period of popular delight in trumpet and cornet solos. He did much to win for Bach the general appreciation of the cultivated musicians of England. His son, Samuel Sebastian Wesley (1810–1876), inherited his father's musical talent and became a famous organist. He composed a great deal of more or less fugitive organ material, but nothing of commanding importance from an artistic standpoint.

Henry Smart (1813–1879) wrote a great deal of miscellaneous organ music of the voluntary type,—andantes, postludes, marches, preludes and the like,—which fits in admirably into the modern condensed form of church service. Other writers of the same generation were Sir John Stainer, Dr. E. J. Hopkins, and Frederick Archer.

The next prominent figure in English organ music in the last half of the nineteenth century was William Thomas Best (1826–1897). He wrote six books of original compositions, but unfortunately is chiefly known by his arrangements for the organ of the great masterpieces of music, vocal and instrumental.

More recently some excellent organ writing has been done by Chas. J. Vincent, Albert L. Peace and Alfred Hollins.

(*e*) *Organ Music in America.* America has been largely content to import its organ music from Europe. When her organists, like Buck, have written original music, it has been largely in imitation of the smaller voluntary numbers of England and Germany.

There is little opportunity for church music in larger forms. Among the writers who have done very creditable work are Arthur Foote, Edward S. Barnes, Pedro Yon, James H. Rogers, and Clarence Dickinson. Mrs. Emma L. Ashford has written a great deal of charming organ music of a practicable grade.

This American organ music is not great, nor epoch making in its new pioneering experiments, but it should not be despised, for it is well written, artistic, and above all practicable and useful under American conditions. Give the organ a larger place in our musical culture and the great music will duly appear.

REVIEW QUESTIONS

1. What was the character of the music played on the ancient hydraulic organ?
2. What architectonic impulse affected the growth of organ music and how?
3. What three stages did organ music pass through in its growth?
4. What were the handicaps of the earliest organ music composers?
5. Who were the chief representatives of the *bravura,* noisy school?
6. What style of music did the next stage of organ music reflect?
7. What did the forms of organ music called "Ricercari," "Canzona Francese" and "Toccata" represent?
8. What was a tablature?
9. What noted composers in the sixteenth century contributed to the further development of organ music?

10. With whom did the expressive stage of organ music begin?

11. Why did the composition of organ music in Italy cease?

12. Who represented the nerve-exciting stage in Germany?

13. In what respects was Arnold Schlick an advance on his predecessors?

14. What was the notational situation in Germany during the fifteenth century?

15. What Italian influence debased German organ music in the latter half of the fifteenth century?

16. What influence had Johann Woltz of Heilbronn?

17. What new element did the German Reformation bring into organ music?

18. In what way did the Lutheran order of service stimulate German organ music?

19. What series of German organ composers prepared the way for Johann Sebastian Bach?

20. What prominent composers do we find in southern Germany?

21. What stage of organ music does Muffat represent?

22. In whom do all the stages blend?

23. Give the leading facts concerning Bach and his work?

24. Who was the popular successor of Bach?

25. Why was Bach unappreciated in his own and succeeding generations?

26. Who was prominent as an organist and composer in the succeeding generation?

27. Who were the leading German organ composers of the nineteenth century?

28. Catalogue the leading French organ music composers of the eighteenth and nineteenth century.

29. Why did not organ music composing flourish in England?

30. What artistically unfortunate form did organ music take in England in the eighteenth century?

31. Who were the leading organ music composers of England in the nineteenth century?

32. What American composers are writing creditable organ voluntaries for church use?

XXXII

PURCHASING A PIPE ORGAN

Class Room Suggestions: An important chapter which ought to be thoroughly discussed and appropriated by the students. It may be well to bring in a competent organ builder to enforce and enlarge upon the suggestions and warnings here given.

Supplementary Reading: Clarke, "Outline of the Structure of the Pipe Organ," Ditson, Boston; Nicholson, "Organ Manual," Ditson, Boston.

1. The Pastor Needs Knowledge of the Pipe Organ

The pastor of a church that is planning to purchase a new pipe organ ought to know enough about the building of such instruments to be at least an intelligent adviser, if not the leader of the movement. It has seemed wise, therefore, to give the most important facts, principles, and warnings involved, leaving the pastor who desires a more thorough knowledge of the structure of this most interesting instrument to secure some general treatise on the subject.

2. Depending on Organist to Manage or Advise

The church that has as an organist a person of good musical and general judgment, who has had a wide experience in connection with the planning of the specifications of pipe organs, who has the necessary knowledge of their materials and mechanical construction, who is personally interested in the congregation and its success, and who is honest, is fortunate indeed. In such a case, the minister need exercise only a sympathetic general super-

vision. He ought by all means to exploit the opportunity of learning all he can about the construction of the instrument; he may have sore need of such knowledge in some later pastorate.

If, on the contrary, his organist is ignorant of organ construction, or is full of notions and fads incompatible with the true musical and spiritual interests of the church, and is anxious to show his superior knowledge by suggesting and urging some fantastic combinations, he will be untrustworthy. He may even have a low sense of honour and exert his influence in favour of the organ builder who will allow him the greatest commission. That the congregation really pays that commission in inferior work, or in an increased price of the organ, hardly needs to be emphasized.

3. Securing an Organ Architect

If the organist is not prepared to plan the specifications, and supervise the construction of the proposed organ, it will be eminently wise to secure a regular organ architect, who for a specified fee will plan and supervise the manufacture, erection and voicing of the new instrument. Perhaps in most cases it will be wise to secure such an architect in an advisory relation at least. Even here care needs to be taken, for some of these organ architects are either regularly retained by some organ builder, or are partisanly prejudiced in favour of some particular firm.

4. The Character of the Builder Very Important

In perhaps no other business is what you buy so dependent on the skill, judgment, executive ability and honour of the manufacturer. The record of the prospective builder for these qualities should be most care-

fully investigated. Better allow a larger price for a given organ to the firm of a good record for using proper and good material, for doing their work thoroughly and well, and for skill in securing good effects.

As an organ is actually built to order, no two organs being built exactly alike, there is no definite scale of prices. Financial comparisons are therefore difficult. Much of the work is of so technical a character, and many of the differences in effect between the good and the bad materials, workmanship and voicing are so beyond the discrimination of the average musical people, that local judgment as to the comparative values of different makes is likely to be based on prejudices and notions, rather than on really important considerations.

5. Investigate the Different Makes Under Consideration

It will be wise to make a tour of investigation among the church organs in a radius of fifty or more miles. As far as possible each make should be investigated separately, or there will be confusion of impression.

(*a*) *The Voicing.* Perhaps the most immediate item to be investigated is the tone, or voicing. The Diapasons should have a round, full, satisfying organ tone; the string stops, Viol and Gamba, should be characteristic, without being too stringy and muddy; the Trumpet stops should have the needed aggressiveness, the Reeds should be smooth and musical, with well defined characteristics, and so on. No mere amateur can pass judgment on this important phase of the investigation.

(*b*) *The Workmanship.* Not only the tone of each organ should be considered, but careful and minute inquiry should be made regarding its reliability, its freedom from irregularity of action, its susceptibility to differ-

ences of temperature and humidity. Discriminate between the organ itself and the motor. Many a good organ has been given a bad name because its electric or water motor was inefficient.

Note not only its general voicing, but its correctness of tune; learn how often it needs to be retuned. Mark the pitch and quality of its reed stops,—Oboe, Bassoon, Trumpet, Vox Humana, etc. In order to be just to these somewhat unreliable stops, you will need to ask when they were tuned last, and to notice whether the temperature of the room is fairly normal.

If a competent cabinet-maker is on the committee, or accompanies it, let him carefully examine, not only the case, but the inside workmanship as well.

(*c*) *The Patents Controlled by Builders.* It will be important to notice the patents controlled by different organ builders. Some of them have special features of more or less value which are found exclusively in their instruments. Other things being equal, the firm controlling the most valuable recent improvements will naturally have the preference. The actual value of such improvements must also be canvassed, as sometimes the solicitors for organ builders make a talking point of alleged improvements whose importance is more seeming than real.

(*d*) *Quality of Action.* Hardly second to the voicing of the pipes is the question of the efficiency of the particular action used by each of the competing builders. It will be a question of promptness of response, of simplicity and of reliability. Not all Tracker actions are equally prompt or easy to touch. Not all Tubular-Pneumatic or Electro-Pneumatic actions respond with equal facility. Comparisons in regard to the actions of the different makes investigated will be helpful.

6. Provide Full Specifications

There should be the same care used in preparing plans, specifications and contract for the organ, that is exercised in the erection of the church edifice itself. Vaguely worded specifications are frequently agreed to by guileless organ committees which permit abuses and "just as good" cheap substitutions that would never have been allowed if properly understood.

See to it that the specifications give not only the stops and mechanical accessories, but the number of pipes in each stop, the material it is to be made of, whether open or stopped, its exact scale in inches, the thickness of its materials, whether wood or metal.

7. Securing Bids

There are two methods of securing bids from organ builders: (1) to decide quite exactly the specifications of the organ you wish, determining the particular stops with their respective scales and the accessories, and ask for prices; (2) the other will be to state the amount you are willing to spend and ask them to offer specifications of the organ, adapted to your space and needs, they are willing to build for that money. The former is the better way, if you have a competent architect. The latter way will give you the benefit of the builder's experience.

Builders are of various classes. There are high-grade, medium, and cheap. There is usually more difference in the quality of the work done between the cheap and the medium than there is between the medium and the high-grade. It is in the matter of the most recent improvements that the high-grade builders are apt to have the decided advantage over the medium-grade builders.

While you cannot get first-class, skillful work done

for little money, you cannot always judge of the quality of an instrument by the price the maker asks. Some builders can build more cheaply than others, because they are more economical in their general management, and can get more and even better work out of their employees. Others take advantage of a reputation based on some large organ built for a very public place to demand large profits. Hence the mere price paid should not be too important a criterion in the canvass of the merits of any particular make.

There will be an astounding difference in the bids received. One builder will offer an organ of twenty stops for the same price that another will ask for ten. Need it be said that often there will be a nearly proportionate difference in the quality of the materials and of the workmanship?

Yet there is something to be said in behalf of the cheap organ. Where there is little culture of a nice and fastidious character and even more limited financial resources, and where the size of the congregation, or the character of its work, calls for a large instrument, it may be entirely wise to contract for the larger or cheaper instrument, provided it is substantially made. Shoddy, flimsy construction, that will not hold together permanently, is dear at any price.

8. The Location of the Organ

The location of the organ should be wisely and carefully settled by the church architect and the organ architect before the church edifice is built. But if the church is already built and the matter of the location has been practically overlooked, the best must be made of the existing situation. Happy is the congregation, the architect of whose church building was wise enough to consult

with an organ architect as to the best provision of space for this instrument and teachable enough to take good advice.

The day of the choir loft in the rear of the audience room is over in the Protestant churches of our land. Shall it be immediately back of the pulpit or on one or the other side of it? That depends too much on the form and plans of the edifice to be settled here.

(*a*) *Back of the Pulpit.* The space back of the pulpit has much to recommend it. There is a sense of unity and concentration in the forces that coöperate in the service. The music is given worthy recognition as on a parity with the sermon. The singers face the congregation from the point acoustically most advantageous for the music. On the other hand, the conspicuousness of the choir magnifies the slight informalities of attitude and action in its singers in a distracting and sometimes exasperating way. What is worse, few architects provide sufficient space for the organ, chorus choir, and pulpit, with the exceedingly unfortunate result that room is found only for that modern ecclesiastical abomination, the quartet choir, shutting out the large possibilities of an ample chorus forever.

(*b*) *One of the Sides.* There is much to be said in favour of one of the sides. For one thing, the organ and choir are more likely to be given sufficient room. The movements of the choir singers are less conspicuous, and less likely to prove a distraction to people with small power of concentration of attention. The slight change of position necessary on the part of the hearer in order to face the singers is not likely to prove a serious objection. It is not so prolonged as in liturgical churches where the lectern and the pulpit are at either side. There may be architectural and acoustical reasons against plac-

ing the organ at one side or the other, however, and those considerations will naturally govern.

(*c*) *Amount of Space.* An even more important point is the space to be allotted. Cramped space means small wind-chest, thus crippling the power of the instrument. It also means putting the Swell Organ above the Great Organ. As the former will be affected by the greater heat of the upper air, it will be out of tune with the latter which is in a cooler stratum of air. Furthermore, the parts of the organ will be so crowded together as to be almost inaccessible.

Simply as a vague, general suggestion, modified by the quality of the organ, it may be said that an average five thousand dollar organ ought to have a space equivalent to fifteen feet long and ten feet wide with a height of twenty feet. An average ten thousand dollar organ calls for a space equivalent to twenty feet long and fifteen feet wide, with a height of thirty-five feet. A good rule is to set aside for the organ seven per cent. of the floor space of the auditorium.

9. Location in a Recess

It is quite common to place the organ in a recess. If this recess is sufficiently large, and ample in height, no harmful effects may be noticed.

(*a*) *Recess Reduces Quantity and Quality of Tone.* But if the ceiling is close to the organ, and particularly if the opening into the main room above the organ is closed by high ornamental pipes, the consequent muffling of the tones robs the instrument both of its brilliancy and of its more delicate effects.

The closer the recess enfolds the organ, the more the tone must be forced in order to secure the necessary power and brilliancy, and the more effectually are the

delicate effects smothered. In such a case one-third of the tone is lost. The higher dissonant harmonic tones displace the lower concordant ones.[1]

(*b*) *Recess Seriously Affects the Tuning.* As the Swell Organ is affected by the heat of the room much more slowly than the more exposed Great Organ, another effect of a recess is that a discord is caused between it and the flattened Great Organ that prevents the use of one or the other.

(*c*) *Recess Occasions "Carrying Over" of Swell Stops.* The recess also leads to a reflection, or "carrying over," of the tone of the Swell Stops, so that the organist cannot hear his soft stops at all, being in entire silence, and ignorant of the effects produced where the congregation is seated. This often explains the "over accompanying" of many organists who drown out the soloist with unduly loud registration.

10. The Organ Should Be Located in the Audience Room

While the muffling effects of a recess, whether open or entirely closed, can be somewhat neutralized by the adjusted wind pressure, and by the voicing, in general it is better to place the instrument out in the open audience room. Even here a slanting ceiling will produce the unfortunate "carrying over" already referred to. It will be more brilliant and more delicate in its effects, because the wind pressure is less forced. It will be more equable in its temperature and hence less likely to be out of tune. It is less likely to be subject to dampness and to the consequent unreliability of action, and to the rust and decomposition of delicate materials. Do not place the organ

[1] Rev. Sir Ousely, the great English organist, called the organ recess "an abomination of modern invention."

diagonally in a corner. Space is wasted and a vacant chamber will be left to accumulate dust and dirt and harbour mice.

11. Preparing the Foundation of the Organ

Once the location has been settled upon, there should be a careful examination of the foundations. A pipe organ with its hundreds of metal pipes, large and small, weighs a number of tons, and if there is any weakness in the support, it will soon become manifest in an irregular settling that will play havoc with the mechanism of the instrument. A damp cellar, just below the floor on which the organ rests, should be guarded against by providing an air space between the floor and the organ.

12. Selection of the Type of Action

After the location and the space to be allotted to the organ have been agreed upon, the question of the kind of action to be selected rises for answer. The action is the mechanism used to connect the keyboard with the valves of the pipes. There are three general types of action,—the purely mechanical Tracker, the Tubular-Pneumatic, and the Electro-Pneumatic.

(*a*) *The Tracker Action.* The Tracker Action is fairly satisfactory for small organs. In a large organ the touch becomes too hard and fatiguing. It is not as prompt in response as the other types of action. It will not allow the variety of couplers the other actions permit; its limit is four couplers, Swell to Great, Swell to Pedal, Great to Pedal, and Swell superoctave to Swell. It is quite susceptible to dampness, whether due to location or to weather, which affects both touch and action. On the other hand, the Tracker Action is much cheaper than

the others and requires less skillful workmen to make temporary repairs.

(*b*) *The Tubular-Pneumatic Action.* The Tubular-Pneumatic Action has the advantage of the Tracker Action in being quicker in its reply, and in permitting an indefinite number of couplers and combinations, without in the least affecting the touch. This latter consideration alone is worth its extra cost, as by these couplers the resources and power of the organ may be indefinitely multiplied. Its touch is not susceptible to atmospheric conditions. Its limitations, as compared with the Electro-Pneumatic Action, are that a separate keyboard or console, often desirable, is immovable, and that the further it is placed from the instrument the slower will be the response.

(*c*) *The Electro-Pneumatic Action.* The Electro-Pneumatic Action is the most expensive, but in addition to all the advantages of the Tubular-Pneumatic Action, it is quicker in a responsiveness unchanged at any distance, and permits a movable console which is connected with the organ only by a cable of wires.

The excellent features in these two latter types of action are somewhat discounted by the fact that, if any irregularity of action or accident occurs, it will probably be so obscure, or so technical, as to require a skilled organ mechanic who is not always at hand. This will be likely to cause delay and heavy expense.

13. Selecting the Stops

Conditions and tastes vary too greatly that space should be given to sets of specifications to be adopted as they stand. It is more helpful to give a few hints as to the relative importance and usefulness of the more usual stops and mechanical accessories.

The number and choice of stops must depend not only on the depth of the purse of the congregation, but on its size and its heartiness of participation in the song service, and particularly on the size of the audience room. To get an organ more powerful than a room will bear is to put into the hands of a possibly ignorant, irresponsible organist the power to torture a helpless congregation. Some people think it is better to have an organ below than above the capacity of the room, but most will prefer to have it exceed, as a reserve for emergencies.

(*a*) *Indispensable Stops for the Great Organ.* In planning the Great Organ, the Open Diapason must come first. This is indispensable, no matter what the size of the organ. Next indispensable to this eight-foot stop is its octave, a four-foot stop called Principal. These two stops have the same diapason quality. The latter may be replaced by the Gemshorn, a somewhat lighter four-foot stop with a sympathetic flute tone which adapts it to solo uses.

Another valuable eight-foot stop for the Great Organ is the Dulciana, occasionally termed the "Sleepy Diapason" because of its slow response. It has a beautifully gentle and delicate quality of tone, adapting it for accompaniment to solo Swell stops, or as a solo stop.

Another desirable eight-foot stop for the Great Organ is the Melodia which has a clear and horn-like tone. It is a stop of medium power, often useful when the Open Diapason is too strong. This stop is often replaced by the Doppel Floete, an eight-foot stop of more body of tone, that is equally effective as a solo stop or in combination.

(*b*) *Additional Stops for Great Organ.* If a larger instrument is needed, other stops may be added, which are suggested in the order of their relative value. The

Gamba is a very stringy-toned eight-foot stop of pronounced *timbre* or colour. It gives incisiveness to the full organ and can be used with good effect as a solo stop. The Fifteenth is a two-foot stop that adds a piercing, brilliant quality to the full organ.

A four-foot stop useful for solo work is the Flute d'Amour, which has a very lovely tone. If peculiar shrillness and brilliance of tone is desired in the full organ the Twelfth, a three-foot stop, and three ranks of Mixtures may be added. Where it can be properly taken care of, the Trumpet, an eight-foot reed stop, will be desirable, both in combination and as a powerful solo stop. A second Open Diapason of smaller scale (*i. e.*, of smaller diameter) will often prove useful. In very large organs the Double Open Diapason, a sixteen-foot stop, is frequently used, adding great majesty, dignity, and power to the tone of the full organ. An organ of this size will need a few more solo stops of varying tone colour such as Viol d'Amour, Clarabella, Philomela, Wald Floete, etc.

(*c*) *Indispensable Stops for Swell Organ.* There are three stops that are essential,—Salicional, Stopped Diapason, and Æoline. The Salicional is an eight-foot open stop with a stringy, almost reedy, quality of tone. The Stopped Diapason is a four-foot wooden pipe which is given an eight-foot tone by closing or "stopping" the ends of the pipes. This soft, mellow stop is very useful both as a solo stop and in combination. The Æoline is the softest stop in the organ, on which the organist must depend for his most delicate effects.

(*d*) *Additional Stops for the Swell Organ.* Perhaps next in importance come the Violin Diapason, and Open Diapason of small scale, with great smoothness of tone and a slightly stringy quality. A very desirable stop for

solo use is the Vox Celeste, an eight-foot stop with double pipes, usually sounding in combination with either the Æoline or the Salicional, the former to be preferred because of its superior delicacy and daintiness.

The two-foot Flautino is very charming and sweet, giving a graceful effect to soft combinations. The whispering effect it produces with Swell Bourdon is very striking. Bourdon is practically a sixteen-foot Stopped Diapason. It has a dignity and a mellowness of tone that fits it for occasions of great solemnity. The Flute Harmonique, which has a bright silvery tone, is a four-foot stop that is admirable for solo purposes and in combination.

The Swell Organ will be the richer for having in addition to the above several reed stops, provided there is a competent tuner either in the community or within reach to keep them in order. The Oboe, either as a single stop running through the whole range of the organ, or divided into two stops, Oboe and Bassoon, is an eight-foot stop of striking tone colour. The less frequent Vox Humana, if rightly voiced and under competent supervision, and if not used too frequently, is an exquisitely beautiful stop. It is a luxury, and not at all appropriate in a small organ. The same may practically be said of the Vox Angelica, which, by the way, is not a reed stop.

(*e*) *Stops for the Pedal Organ.* The number of stops in the Pedal Organ will depend on the number of stops and couplers in the Great and Swell Organs which it is to support. An organ of less than ten stops ought to have only a sixteen-foot Bourdon. Softer pedal effects can be provided for by means of couplers to Swell and Great Organs, although Lieblich Gedackt, an eight-foot stop of quiet tone, is often used for this purpose.

If there are ten or more stops, and many couplers,

"sub" and "super," the Pedal Organ should include the massive sixteen-foot Open Diapason. Only for a very large auditorium and an unusually large organ will there be any call for the Double Open Diapason, a thirty-two-foot stop of overwhelming majesty and grandeur. Before this stop becomes necessary there will be room for the Violone or the Violoncello, softer-voiced stops with the quality of the lowest stringed instruments.

14. Selecting the Accessory Stops

(*a*) *Selecting the Couplers.* Special attention should be given to the couplers. Swell to Great, Swell to Pedal, Great to Pedal, Swell superoctave to Swell, Swell suboctave to Swell, Swell superoctave to Great, Swell suboctave to Great, are all well-nigh indispensable.

Where great power is demanded, Great superoctave to Great, Great suboctave to Great and Pedal superoctave to Pedal will be desirable. These couplers should be controlled by tablets wherever possible. It is well to add seven to twelve more pipes to the upper part of all Swell stops than appear on the manual, in order to make the superoctave coupler effective in the higher notes.

(*b*) *Selecting the Combination Pistons.* Then there are Combination Pistons which bring on certain fixed or variable combinations of stops, which are occasionally convenient, although by no means as important as the couplers.

(*c*) *Selecting Pedal Accessories.* There are several pedal mechanisms that are essential: the Balanced Swell Pedal which controls the Swell Box; the Full Organ Pedal which makes every stop and coupler immediately effective; the Grand Crescendo Pedal which gradually brings on the stops from the softest to the Full Organ and *vice versa.* Then there are Combination Pedals

which may take the place of the Combination Pistons, or be added to them, so furnishing greater variety.

Every organ should also have a Tremolo. While an organist of tawdry taste will abuse it, there are times when it is so essential to the musical effect that its misuse must be endured.

15. Checking up the Specifications

It would take a technical volume to enter into the details of all the points that need to be carefully guarded and checked up. The usual practices to be guarded against are: 1st, the use of half length stopped pipes in place of full length open pipes in the lower twelve notes; 2d, the substitution of wood for metal in the lower twelve notes of stops that ought to be made of metal throughout; 3d, the use of cheap soft woods or even of good wood of insufficient thickness; 4th, the use of cheap metal for the pipes.

(*a*) *Points of Danger in the Great Organ.* See that your Open Diapason and Dulciana pipes are full scale, all metal and all open. It is a very common trick to put into the specifications metal and wood. The lower twelve notes are then made of wood and stopped at that, robbing the tone of its strength and roundness.

(*b*) *Points to be Watched in the Swell Organ.* The same is even more true of Violin Diapason or Swell Open Diapason, as the half length stopped pipes allow a much smaller and less expensive swell-box.

It often happens that the lower twelve pipes of the Open or Violin Diapason in the Swell serve for the Salicional as well, saving the builder the expense of twelve large pipes. When both stops are drawn, the bass is weaker for the missing pipes. In all these cases insist on having sixty-one open metal pipes in the specification

and in the organ as well. Mark well the four words, *sixty-one, open, metal,* and *pipes* (not notes). The Flute Harmonique is an all metal stop,—sixty-one open pipes.

See that the Salicional is specified sixty-one open metal pipes, or a builder whose sense of honour has a coarse grain will use a short pipe with a metal cap. This will sound the fifth quite prominently and offensively.

The Stopped Diapasons are made of wood, preferably spruce. Poplar is frequently used by fairly good builders, but it is a softer and less resonant wood. Basswood should never be permitted. The heavier the wood, within reasonable bounds, the richer the tones. The larger pipes should not be made of less than inch stuff and will be all the better for being three-sixteenths of an inch thicker,—smaller pipes somewhat in proportion.

When Bourdon pipes have a small scale they give a light tone and sound the twelfth quite perceptibly. In a Vox Celeste forty-nine pipes are all that are needed; but do not permit the lower octave—twelve notes—to be dropped out of the Oboe. The octave below tenor or middle C costs the builder as much as all the rest of the notes of the stop put together; hence his desire to stop at this point.

In general be suspicious when you see the word "notes" substituted for "pipes" in the specifications; that is *prima facie* evidence of intended substitution of one kind or another.

(*c*) *Substitution in Pedal Organ.* Another trick to be guarded against is to specify two pedal stops, Bourdon and Lieblich Gedackt, and then to furnish only a single set of pipes. If either is then used separately, the only harm that will be done is that the Lieblich Gedackt is slightly out of tune; but when you wish to use both, the Lieblich Gedackt is entirely absent.

(*d*) *Weak Point in Bellows.* See that the Bellows are strong enough, have an ample wind-box below, have one set of reversed folds, and are supplied with three feeders. The bellows should be double leathered inside and out with the best alum-tanned sheepskin. Remember, the more couplers you have, the larger the bellows must be; but large bellows spell large space, and for a good organ that must be provided.

In good actions you have an individual supply of wind for every pipe; otherwise invariably correct tune will be out of the question.

(*e*) *Important Points in Action.* In the Tubular-Pneumatic and Electro-Pneumatic actions it is important that only the best quality of pneumatic leather be used, not varnished dress-lining, nor rubber-lined cloth. An Electro-Pneumatic action should have self-cleaning contacts, with sliding contacts for couplers.

(*f*) *Care in the Voicing.* Regarding the voicing, the larger part of the work should be done after the organ is in position in the room where it is to be used, in order that the peremptorily needed adaptation of the instrument to the acoustical character of the room be secured. This is lost if the voicing is done at the factory.

There has been no purpose, much less effort, to be exhaustive in these hints on organ building. Many important matters have been omitted.

The warnings given are simply suggestive of the need of careful supervision of both the specifications and the construction. They will have done their best service if they lead the minister and his organ committee to secure the advice and supervision of a competent and reliable organ architect, even though the instrument they propose to secure be only small or medium sized.

Indeed, little suggestion has been given for more than

a medium sized organ of two manuals. Churches which desire a large organ presumably are wise enough to secure competent professional help in planning and supervising so important a project.

REVIEW QUESTIONS

1. Who ought to be the leader in the purchase of the pipe organ?
2. When may a church depend on its organist for the needed leadership or counsel?
3. Who should be secured in case the church has no one qualified to supervise the purchase wisely?
4. Why is the character of the organ builder important?
5. Suggest the lines of needed investigation.
6. On what basis should the contract be let?
7. What need is there of clear and precise specifications?
8. Where should the organ be located?
9. How much space should be allowed for it?
10. Why should it not be placed in a recess?
11. What preparation should be made for its foundation?
12. State the advantages of the three types of action.
13. What are the indispensable stops of the Great Organ?
14. What stops may be added?
15. What are the essential stops of the Swell Organ?
16. What additional stops are recommended?
17. Give the stops needful in the Pedal Organ.
18. What couplers and other accessories are needed?
19. What points in the specifications need to be guarded?

Index

A

Abbey, A. J., 337
Ackley, W. D., 351
Action, Quality of in organ, 441
  Types of—in organ, 447
Adams, Carrie B., 363, 381
Adaptation, Value of, 152
Adapting church music, 151
Adapting music, Need of, 141
Adapt music, How to, 142
Ahle, Johann Rudolph, 265
Ainsworth's Psalter, 293
Allen, Chester G., 332
Ambrose, Paul, 363
Ambrosian reforms, 223
American hymn tune, Characteristics of, 312
American psalm tune composers, 297
Anerio, 249, 357
Anthem, American, 361
Anthem, Development of, 358
Anthem, Etymology of, 354
Antiphonal music among Hebrews, 209
Antiphonal singing among early Christians, 221
Apostolic age, Music in, 213
Appeal of instrumental music, 419
Applied art, Music as, 148
Applied art, Music originally, 185
Arcadelt, 249, 356, 357
Archer, Frederick, 435
Arentino, Guido, 238
Artistic impulse, Abuse of, 247
Artistic musical impulse, 179
Artistic music, Growth of, 247
Artistic responsiveness, Developing, 38
Art, Pure vs. applied, 147
Art vs. morals, 139
Ashford, Mrs. E. L., 363, 381, 436
Associated ideas, 130
  Incongruities of, 132
  Prejudice due to, 132
Assyrians, Music among, 192
Attwood, 361

B

Bach, Carl Philip E., 373
Bach, Johann C., 358
Bach, Johann Sebastian, 243, 261, 358, 370, 428, 432
Bailey, Daniel, 296, 297, 301
Baker, B. F., 306, 310
Baker, Henry Williams, 288
Baltzell, Isaiah, 339
"Barcarolle" by Offenbach, 109
Barnby, Joseph, 289, 311, 361
Barnes, Edward S., 436
Bartholomew, 112, 121
Battishill, 361
Bay Psalm Book, 293
Beauty vs. religion, 139
Beethoven, Ludwig von, 128, 374
Beethoven's "Fifth Symphony," 39
Bellows in pipe organ, 398
Bellows, Problem of, 409
Benedicte, The, 221
Benedictus, 221
Bennett, William Sterndale, 378
Berlioz, Hector, 380
Berridge, Arthur, 379
Berwald, W., 363
Best, Wm. Thos., 435
Beveridge, Bishop, 32
Bible, Music in the, 35
Billings, William, 113, 298

Billroth, 113
Binchois, 355
Black, J. M., 338
Blind Tom, 106
Bliss, Paul, 363
Bliss, P. P., 306, 337, 346
Blow, 360
Blowers in organ, 398
Bourgeois, Louis, 263
Boyce, William, 287, 361
Bradbury, William B., 310, 311, 328, 329, 331, 345, 362, 381
Brasert, Eloy, 355
Bravura school, 421
Bridgman, Laura, 104
Bridgewater Collection, 304
Bruch, Max, 376
Brumel, 356
Buck, Dudley, 362, 379
Bull, 433
Burney, Chas., 287
Buxtehude, Dietrich, 369, 427, 432
Byrd, 357, 359, 433
Byron, 139

C

Caldara, 368
Callcott, John Wall, 287
Calcott, William H., 287
Calvin's attitude toward music, 262
Cantata in America, 381
  In England, 379
Cantus firmus, 243, 250
Canzona Francese, 422
Carey, Henry, 287
Caricaturing gospel songs, 158
Case, C. C., 306, 363
Cassel, Rev. E. T. and Flora H., 350
Cavalieri, 367
Cave, Dr., 279
Chadwick, Geo. W., 363, 380
Charpentier, Marc Antoine, 380
Cherubini, 358
Choir organ, 389
Chorale, Development of, 264
Chrysostom, 136
"Churchly" music, 150
Church work, Music in, 149, 161
Ciphering, 400
Clarke, Jeremiah, 360
Clefs in music, 84
Cole, Thomas, 284
Colonna, 368
Colorato, 421, 426
Combination pistons, 452
Common people, Considering, 23
Compére, Loyset, 356
Concords, 80
Congregational singing:
  Decadence in, 294
  Reforms in, 295
Console of pipe organ, 386
Chords, Major, minor, etc., 81
Costa, Michael, 378
Cotton, Rev. John, 293
Counterpoint, 243, 253
Couplers, Selecting, 452
Coverdale, Miles, 271
Cowen, F. H., 379
Cowley, Robert, 272
Cranmer's rule, 277
Crispin's Psalter, 273
Croce, 249, 357
Croft, 360
Crosby, Fanny, 334
Crotch, William, 378
Crüger, Johann, 265
Curwen, Dr. J. S., 151
Cutler, Henry S., 311
Cuyler, Theo. L., 7

D

Dance, Development of, 183
Danks, H. P., 363
Darnton, Chas., 379
Darwall, John, 287
Darwin on origin of music, 176
Daye's Psalter, 273, 274
Decadence in congregational singing, 294
de Giardini, Felice, 287
Demoralizing, Music may be, 140
des Pres, Josquin, 249, 355, 356
Diapason tone in organ, 397
Diaphony, 237

di Bologna, Marco Antonio, 421
Dickinson, Clarence, 436
Dickinson, Dr. Edward, 167, 217
di Lasso, Orlando, 357, 359
di Rore, 357
Diruta, Girolamo, 423
Discant, 241
Discords, Importance of, 80
Discords, Musical effect of, 117
Distress caused by music, 144
Doane, W. Howard, 333, 334, 345, 363
Drawstop action, 391
Dubois, Francois, 432
Dufay, 355
Dunstable, 355
Duty of praise, 34
Dvorak, Antonin K., 317, 376
Dykes, John B., 288, 289, 311

E

Earliest English church music, 269
Early church organs, 405
Eccard, Johann, 264
Edson, Lewis, 284
Edwards, Jonathan, 29
Effects of music:
  Immediate, 112
  In major, 114
  In minor, 115
  On animals and children, 106
  On nervous tension, 113
  On sensory nervous system, 104
  Physical, 105, 163
  Physical basis of, 103
  Through discords, 117
  Through force, 119
  Through pitch, 118
  Through rhythm, 117
  Through quality of tone, 119
Egyptians, Music among the, 189
Electro-pneumatic action, 391, 448
Elgar, Sir Edward, 378
Eliot, 294, 295
Elvey, George Job, 289
Emerson, L. O., 306, 309, 310, 337, 362
Emotional appeal of music, 189
Emotionality of music, 107
Emotional preparation through music, 165
Emotional power of music, 40
Emotions:
  Agreeable and disagreeable, 122
  And the nerves, 122, 123
  Complexity of, 123
  Expressing all religious, 155
  Intensified through music, 166
  Social-religious, 157
  Substitution of, 169
  Translated into music, 127
  Variety of worshipful, 156
Episcopal Church on music, 33
Erlkönig, 116
Estes' Psalter, 274
Evangelistic campaigns, Songs of, new, 349
Excell, E. O., 350
Expression, Notation of, 91

F

Faber, Nicholas, 411
Faugues, 355
Fearis, John S., 363, 381
Festa, Costanza, 357
Fillmore, J. H., 339
Fischer, Wm. G., 335, 344
Flagg, Josiah, 296
Florid School, Hymn tunes of the, 284, 285, 286, 287
Flue pipes in organ, 391
Flute tone in organ, 397
Folk music, German, 254
Foote, Arthur, 363, 436
Force, Musical effect of, 119
Force, Notation of, 92
Form, Musical, 79
Form, Notation of, 93
Foster, Stephen C., 317
Foundation for organ, 447
Franck, Cæsar A., 380, 432
Frescobaldi, Girolomo, 423

Frohberger, Johann Jacob, 428
Fugue tunes, Rise of, 284

G

Gade, Wilhelm Niels, 376
Gabriel, Chas. H., 339, 350, 351, 363
Gabrielli, Andrea, 249, 357, 423
Gabrielli, Giovanni, 249, 357, 423
Garrett, G., 379
Gaul, Alfred R., 379
Gauntlett, Henry John, 287, 415
Geibel, Adam, 340, 349
Genevan Psalter, 263
German tunes still in use, 266
Germany, Early church music in, 254
Gibbons, Orlando, 359, 433
Gloria in Excelsis, 220
Gloria Patri, 220
Golden age of polyphonic church music, 359
Gospel Song, 311, 328
  Offspring of the Spiritual, 343
  Originators of the, 344
  Rise of the, 338
  What is a, 342
Gospel Songs, Change in style of, 348
"Gospel Hymns," Origin of series of, 347
Goss, Sir John, 287, 361
Gottschalk, 112
Goudimel, 248, 357
Gould, J. E., 311, 337
Gounod, Chas. Francois, 380
Grannis, S. M., 344
Graun, Heinrich, 358, 372, 423
Great Awakening, The, 303
Great compositions, Study of, 48
Great organ, 387
Great organ, Stops for, 449
Green, Maurice, 361
Greek influence on Christian music, 214
Greek modes, The, 197
Greek modes in Christian Church, 219
Greek scale, The, 197
Greeks, Music among the, 193
Gregorian chant, 228, 246
Gregorian liturgy, Spread of, 234
Gregorian reforms, 225
Gregorian scales, 227
Gregory the Great, 30, 225
Guido Arentino, 233, 238
Guilmant, Felix A., 432
Gurney, Edward, 103, 108, 144

H

Hall, J. Lincoln, 340, 349, 363
Hanby, Rev. B. R., 317, 336
Handel and Haydn Society, 304, 308
Handel, Geo. Fr., 358, 371, 376
Harmony, What is, 80
Hartsough, Louis, 343
Hasse, Johann Adolph, 358, 373
Hassler, Hans Leo, 264, 423, 427
Hastings, Thomas, 306, 315, 328
Havergal, William Henry, 274, 287
Hawley, C. W., 363
Haydn, Franz Joseph, 358, 373
Hayes, 361
Hebrew music, Character of, 207
Helmholtz, Herm. L. F., 62, 100, 108
Herbart, J. F., 100
Herbert, J. B., 363
Heretical hymns, 222
Hexachord, 238
Heyser, E. K., 363, 381
Hiles, Henry, 379
Hintersatz in pipe organ, 411
History of church music, Value of, 36
History of music, 48
Hoffman, Rev. E. A., 337
Hofheimer, 425
Holden, Oliver, 301

Hollins, Alfred, 435
Hood, John H., 335
Hopkins, Edward John, 289, 435
Hopkins, Rev. John, 271
Holyoke, Samuel, 301
Hucbald, 236, 242
Hubbard, John, 304
Hugg, George C., 339
Hull, Asa, 332, 345
Humfrey, Pelham, 359, 434
Hursley, William, 287
Hydraulic organ, 404
Hydraulus, 409
Hydraulus, Music of, 417
"Hymns Ancient and Modern," 288, 311
Hymn tunes, Transition to, 282

I

Ideal vs. practical, 154, 155
Illustrative material in music, 41
Innate, Music is, 174
Instruction, Music means of, 159, 221
Instruments among the Hebrews, 204, 206
Instruments and early Christians, 219
Instruments, Development of musical, 184
Instruments in 1000 A. D., 240
Intellect and music, 106
Intellectual appeal of music, 189
Intellectual basis for musical impression, 129
Intellectual side of music, 145
Intervals, 72
Inversion of intervals, 75

J

Jubal's organ, 402
Judgment, Criteria of—in church music, 21

K

Keiser, Reinhard, 358, 369
Keller, Helen, 104
Keyboard, Improvement of, 413
  Introduction of, 418
Key desk of pipe organ, 386
Kindermann, 427
Kirkpatrick, Wm. J., 334, 335, 336, 343, 344, 348, 363
Kurzenknabe, J. H., 339
Kyrie eleison, 254

L

Lambillotte, Louis, 432
Lansing, A. W., 363
Lassus, Orlandus, 249
Laudino, Francesco, 421
Lavignac, 237, 242
Law, Andrew, 301
Lefébure-Wély, L. J. A., 432
Leman, James, 279
Lemmens, Nicolas J., 433
Length of notes, 87
Lindpainter, 375
"Lining out" hymns, 295, 297
Liszt, Franz, 139, 376
Liturgy, Development of, 220
Liturgy, Elaboration of, 222
Location of organ, 443
Lohengrin, 118, 121
Lollards, 270
Lorenz, E. S., 339, 363, 381
Lorenzo the Magnificent, 421
Lowry, Rev. Robt., 332, 333, 334, 345, 363
Luebeck organ, 414
Lully, 360
Luscinius, 425
Luther, Martin, 29
Luther's breadth of mind, 261
  Hymns and tunes, 259
  Tunes, Character of, 260
Lyon, Finley, 381
Lyon, James, 296, 297

M

Magnificat, 221
Major music, Effect of, 114
Manner and quality, Marks of, 92
Manney, Chas. F., 363
Marenzio, 357
Marot, 263, 271

Marston, G. W., 363
Mason, Lowell, 23, 31, 267, 305, 307, 311, 315, 329, 361, 362, 363
Matthews, Timothy Richard, 289
Mauclaire, Camille, 110
Maunder, J. H., 379
Mazzuchi, Domenico, 367
McCabe, Chaplain C. C., 346
McCosh, Dr., 143
Macfarren, Sir George Alex., 152, 287
McGranahan, James H., 306, 348
McPhail, M. L., 363
Means to an end, Music as, 140
Measures, Musical, 89
Mediæval church music:
  Characteristics of, 249
  Effect of on modern ears, 251
Mehul, Henri Etienne, 380
Meistersinger, die, 281
Melody and tune compared, 76
Melody, Definition of, 75
Melody, Development of, 180
Mendelssohn, Felix, 375, 431
Meredith, I. H., 340
Merula, Claudio, 422
Metrical psalms, 271
Metrical version of the Acts, 275
Michelagnolo, 367
Miles, Austin R., 349
Ministerial indifference, 28
Ministerial interest, Decay of, 31
Minister's responsibility, 32
Minnesingers, 241
Minor music, Effect of, 115
Miracle play, Transformation of, 366
Mixtures, 64, 397
Modern hymn tune, 286
Modes of the Greeks, 197
Modulations, 81
Monk, William H., 289
Monteverde, 423
Moody, Dwight L., 54
Moral character, Music has no, 135
Morales, 357
Morton, Dr. Frank, 110
Motet and anthem compared, 353
Motet and anthem, History of, 353
Motet, Development of, 354
Motet, Etymology of, 354
Mozart, Wolfgang Amadeus, 358, 373
Muffat, Georg, 428
Murray, J. R., 337
Musical conventions, 305
Musical feeling vague, 127
Musical means, Study of, 50
Musical pastors, 29
Musical sound:
  Definition of, 60
  Force of, 61
  Pitch of, 61
  Timbre of, 62
Musical talent not needed, 52
Musical vs. nervous impressions, 125
Mutation, 239

N

Naninis, the, 249, 357
Naumann, 190, 246
Negro melodies outgrowth of Spirituals, 316
Neidlinger, W. H., 363
Neri, S. Philip, 367
Nero, 404, 418
Nervous appeal of music, 188
Neukomm, 375
Neumes, 231
Nevin, Geo. B., 363, 381
New England psalmody, 291
New England psalters, 293
Notation:
  Development of, 229
  Early effort at, 230
  Knowledge of, 46
  Of pitch, 83
Nunc Dimittis, 221

O

Ogden, Wm. A., 337, 350, 363

Old Hundredth, 158, 263, 272, 288
O'Kane, Tullius C., 332, 344
O'Keghem, 355
Oratorio:
  In America, 379
  In England, 376
  In France, 380
  In Germany, 368
  In Italy, 367
  Origin of, 365
  What is an, 365
Organ architect, Service of an, 439
Organ builder, Character of, 439
Organ composition, Development of, 420
Organ of the Bible, 402
Organizing the mass by music, 164
Organum, 236, 242, 244
Organum profanum, 238
Osiander, Lucas, 264
Origin of music:
  Bird theory of, 177
  Darwin's theory of, 176
  Spencer's theory of, 177
  Theories all speculative, 175
  Wallaschek's theory of, 177
Overtones, 62

P

PACHELBEL, 427
Paine, John Knowles, 380
Palestrina, 248, 251, 253, 357
Palmer, H. R., 306, 337, 363
Parker, Horatio W., 363, 380
Parks, J. A., 363
Parry, C. Hubert H., 181, 198, 237, 246, 254, 361, 378, 379
"Pastoral Symphony," Beethoven's, 128
Patriarchal music, 203
Patristic age, Music in the, 218
Paulmann, Conrad, 424
Peace, Albert Lister, 289, 435
Pedagogical use of music, 159, 221
Pedagogical value of music, 159
Pedal accessories, 452
Pedal organ, 389
Pedal organ, Stops for, 451
Pedals, Invention of, 414
Pedals of pipe organ, 387
Pentatonic scale in "Spirituals," 324
Pergolesi, 358
Perkins, Theo. E., 332, 337
Perkins, W. O., 310
Petrie, H. W., 381
Phillips, Philip, 332, 344, 345
Physical basis of musical effect, 103
Physical effects of music, 105
Pierson, Henry Hugo, 378
Pietistic folk-song, 262, 267
Pilgrim Chorus, 101
Pipe organ:
  Description of, 385
  Organist's part in purchasing, 438
  Pastor's part in purchasing, 438
Pitch, Musical effect of, 118
Pitch, Notation of, 83
Place of music in the church, 32, 42
Plain song, 270
Plain song arrangements, 290
Pleasure produced by music, 163
Playford, 274, 296, 301
Playford's Psalter, 294
Pneumatic action, 390, 448
Pole, William, 99
Polyphony, 244
Portative organs, 406
Porter, H. W., 363, 381
Positive organs, 407
Power of organ, Control of, 411
Prætorius, 423
Practical efficiency, Need of, 22
  What is, 22
Pratt, Waldo S., 33
Pre-Christian music, 188
Preparing for message, Music, 164
Program music, 128

Progress of musical effect, 167
Prose, Development of, 244
Protheroe, Daniel, 363
Psalmody, Dark age of, 278
Psalmody in New England, 291, 296
Psalmody, Reaction against, 304
Psalmody and hymnody compared, 282
Psalm singing, Opinions about, 292
Psalm tunes, Characteristics of, 277
  Surviving, 278
  English, 273
Psalters with tunes, 272
Psychology of music, 47, 99
Purcell, Henry, 360, 434
Pure art, Music as, 148
Puritan vs. Cavalier in music, 292
Puritan vs. Pilgrim in music, 291
Purpose of church music, 149

Q

Quality of tone, Effect of, 119

R

Raff, Joseph Joachim, 376
Range of human voice, 85
Ravenscroft, Thomas, 274
Raw materials of music, 178
Read, Daniel, 301
Reed pipes in organ, 395, 404
Reed tone in organ, 397
Reinken, 427
Religious character, Music has no, 137
Religious emotions, Expressing all, 155
Religious value of music, 138
Religious work, Music in, 149, 161
Results measure of value, 23
Rhythm:
  Development of, 182
  Early prominence of, 180
  Elements of, 76
  Kinds of, 77
  Musical effect of, 117
Ricercari, 421, 422
Rinck, J. C. H., 431
Ritter, August Gottfried, 432
Ritual, Development of, 186
Roberts, J. Varley, 379
Rodeheaver, Homer A., 351
Rogers, James H., 363, 436
Root, Geo. F., 306, 310, 336, 363
Rossini, 368
Rowbotham, 207, 209

S

Saint-Saëns, Chas. C., 380, 432
Sankey, Ira D., 346
Scale, Musical:
  Chromatic, 68
  Diatonic, 65
  Finding the, 64
  Intervals of diatonic, 66
  Minor, 67
  Pentatonic, 67
  Relative importance of notes in, 66
  Transposition of, 69
  Whole step, 68
Scarlatti, 358, 368
Scheidemann, Heinrich, 427
Scheidt, Samuel, 426
Schlemmer, 427
Schlick, Arnold, 425
Schnecker, P. A., 362, 381
Schneider, Hans, 105, 115
Schubert, Franz, 116, 374
Schuetz, Heinrich, 368, 423
Schumann, 128
Scottish Psalter, 275
Seagar's Psalter, 273
Sebastiani, Johann, 369
Seidl, Anton, 102
Senfl, Ludwig, 255
Sensory nervous system, Effect of music on, 104
Sequence, Development of, 244
Seward, Theo. F., 363
Sharps and flats, 85
Shelley, Harry Rowe, 362
Sherwin, Wm. F., 311, 332, 363

Singing societies in New England, 295
Smart, Henry, 289, 435
Social value of training, 42
Solo organ, 389
Southard, L. H., 310
Space needed for organ, 445
Speaks, Oley, 363
Specifications, Checking up, 453
  Need of full, 442
Speed, Notation of, 91
Spence, Wm. R., 363
Spencer, Herbert, 177
Spiritual results, 25
"Spirituals," American:
  Body of lost, 315
  Characteristics of, 318
  Examples of, 319
  Good church music, 327
  History of, 314
  Influence of, 327
  Minor element in, 325
  Negro melodies come from, 316
  Number of, 317
  Origin and spread of, 317
  Pentatonic scale in, 324
Spiritual songs in early church, 216, 217, 218, 219
Spohr, Louis, 374
Spontaneity in music, 133
Squarcialupo, Antonio, 421
Staff, Development of, 231
Stainer, Sir John, 203, 289, 361, 379, 435
Standards in church music, 153
Stanford, 361
Stebbins, Geo. C., 348
Steggall, Chas., 289
Sternhold and Hopkins, 271
Sternhold and Hopkins' Psalter, 278, 293
Stickney, John, 301
Stimulating character of music, 109
Stockton, Rev. J. H., 335, 344
Stopped pipes in organ, 403
Stops, Invention of, 412
  Selecting, 448
Stradella, 368
String tone in organ, 397
Strype, 272
Substituting related emotions, 169
Sullivan, Arthur S., 289, 378
Sunday-school music:
  Abroad, 340
  Effect of Gospel Song on, 338
  New style of, 330
  Super-modern style of, 339
  Western development of, 336
Sunday-school Song, 328
Sunday-school song books, Earliest, 328
Swan, Timothy, 301
Sweelinck, Jan P., 423, 433
Swell organ, 388
Swell organ, Stops for, 450
Sweeney, John R., 334, 335, 348, 363

T

Tablature, 422
Talent, Musical—not needed, 52
Tallis, Thomas, 249, 273, 274, 357, 359, 433
Tannhäuser, 101, 102, 121
Tansur, William, 274, 296
Te Deum Laudamus, 221
Telemann, Geo. Philip, 371
Therapeutic value of music, 143
Time, Notation of, 87
Timotheus, 412
Toccata, 422
Tomer, W. G., 311
Tone colour, Control of, 63
Towne, T. Martin, 363
Towner, D. B., 349
Tracker action, 390, 447
Transition to hymn tunes, 303
Treading the bellows, 409, 410
Troubadours, 240
Tubular-pneumatic action, 448
Tye, Dr. Christopher, 275, 359, 433

U

Unconscious musical impulse, 179
Unmusical ministers, 55

V

Vail, S. J., 332, 345
Van Eycken, Simon, 433
Van Noordt, Anthony, 433
Varied quality of tone, Securing, 412
Verdelot, 357
Vernacular hymns in Germany, 253, 255
Vincent, Chas. J., 435
Virgin Mary, Songs to, 253
Voicing of organ, 440
von Rheinberger, Joseph Gabriel, 432

W

Wagner, Richard, 101, 118, 128, 136
Wainwright, John, 287
Wallascheck, Richard, 102, 119, 177
Walmisley, 361
Walter, Rev. Thos., 296
Walther, Johann, 258
Ward, Samuel A., 311
Waters, Horace, 330
Watts, Isaac, 279, 281, 282
Webbe, Samuel, 287
Webb, George J., 306, 310
Weldon, 360
Wesleyan stimulus to hymn tunes, 283
Wesley, John, 282
Wesley, Samuel, 435
Wesley, Samuel Sebastian, 288, 361, 435
West, 361
Whitney, W. W., 338
Widor, Chas. Marie, 432
Willaert, Adrian, 249, 357, 359, 421
Williams, Aaron, 275, 296
Willis, Richard Storrs, 128, 167
Wilson, Ira B., 340, 363, 381
Wise, 360
Wittingham, W., 276
Woltz, Johann, 426
Woodbury, Isaac B., 306, 310, 329, 363
Wordsworth, Bishop, 283
Workmanship on organ, 440
Worship? What is, 167
Wycliffites, 270

Y

Yon, Pedro, 436

Z

Zeuner, Heinrich C., 310

Printed in the United States of America

HECKMAN BINDERY
BOUND TO
DEC 18 1939
PLEASE
N. MANCHESTER, IND.